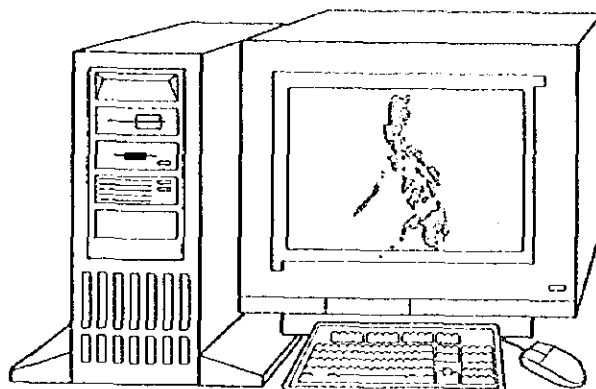


*Attachment to Part – K*  
**OPERATION MANUAL**  
**FOR DATABASE**

MASTER PLAN STUDY ON WATER RESOURCES MANAGEMENT  
IN THE REPUBLIC OF THE PHILIPPINES

# Operation and Maintenance Manual for Database System

Introducing PHILDB



JANUARY 1998

JICA STUDY TEAM



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C h a p t e r 1

# Introduction

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## 1.1 General

This operation manual has been prepared to explain the contents of database file whose name is PHIL.DB as well as how to run it quickly and properly. It shows user how to do the usual operation such as retrieval, addition and editing of data in PHIL.DB. The beginner user will acquire the operation method step by step by means of actually operating it because a way of operating is easily understood with a lot of visual examples. When user needs to further develop PHIL.DB in a different form in the future or learn some of technical aspects involved therein, it is recommended to learn Microsoft Access, a software used to construct the database, first of all.

This database system has been established as a component of the Master Plan Study on the Water Resources Management in the Republic of Philippines (JICA, 1997-1998). In this study, the database system was constructed to store the important data and information that were concerned with water resources development and management in the country. Furthermore, this manual was prepared to properly operate and maintain the database system constructed through the Study.

The database system consists of the following 6 database sub-systems and a tool for hydro-logical statistical analysis by the Gumbel method and Log Pearson Type III distribution.

- 1) Rainfall Database
- 2) Streamflow Database
- 3) Irrigation Database
- 4) Dam Inventory Database
- 5) Socio-Economy Database
- 6) Groundwater Database
- 7) Tool for Probability Calculation

Outline of the database which is described in each chapter of this brochure is as follows.

Chapter 2 - Rainfall Database - explains the database of rainfall data. User can retrieve daily, monthly and annual rainfall amount from the system which basically stores daily rainfall data. In addition, user can also search the information of location of the rainfall gauging station such as latitude, longitude, elevation, water resources region and province. The data retrieved are provided in a form of daily rainfall data table and monthly rainfall table. In addition to these tables, you can get annual hyetograph quickly. With respect to data input, this database system is prepared in two ways. One of them is the way that users encode the data directly on this system, and other one is to enter into the database the data which have been read from other files such as Microsoft Excel and Text format.

Chapter 3 - Streamflow Database - explains the database of river flow data such as discharge, gauge height and the rating curve. In this database sub-system, user can retrieve mean daily discharge, mean daily gauge height by using retrieval menu or regional map that appears on a computer screen. The retrieved data are derived in a form of mean daily discharge / gauge height tables, annual hydrograph, flow duration curve, mean monthly discharge table, rating table and its graph. With respect to data input, this database system can be constructed in different three ways. The first way is that users encode the data directly on this system, and the second method is entry of the data which read from other file. The third one, if rating table at the gauging station has already been entered in the database system, is to automatically generate discharge from gauge height based on the rating table.



Chapter 4 - Irrigation Database - shows the database that is concerned with irrigation projects. The data of national irrigation system and irrigation water requirement were stored in this database system. Concerning the former, it is possible to retrieve the salient features of each irrigation project. In the latter, you can retrieve annual schedules of cultivated crop and quantity of irrigation water requirement on a 10-day basis which crop needs. It is possible to search these data by using retrieval menu on a computer screen, in which region name, province name and kind of crop are used to classify the necessary data, or regional map. As regards editing data and information, users can encode easily because the menu for data input is prepared.

Chapter 5 - Dam Inventory Database - explains about database on main features of existing and proposed dam in the whole Philippines. In this database system, users can retrieve the information of location, dam purpose, hydrology, reservoir, dam structure and others by using retrieval menu, and edit those data easily using Add / Edit menu.

Chapter 6 - Socio-Economy Database - describes the operation of database which stores socio-economic data such as population, employment and GDP. These data have been collected and estimated by the Socio-Economist of the Study Team. In this database system, user can retrieve the data from retrieval menu or regional map. Thus, users can get the results of provincial and/or regional socio-economic projection, the annual average growth rates in a form of table showing the projected values and their graph for the period from 1970 to 2025.

Chapter 7 - Groundwater Database - explains the database on groundwater. This database focuses on deep well and spring water data of Level III system which deal mainly with the municipal and industrial water use. Number of water resources facilities for deep well, spring and surface water in each water district, its quantity of water and population served in the water district are stored in the database. Users can retrieve the data from regional map or retrieval menu on a screen, which has region name, province name and name of water district. In the database, it is possible to search the data in each water district, and searched data for the water district are also shown on a screen together with the summary of provincial and regional values.

Chapter 8 - Probability Calculation - explains the tool to estimate the probability of meteo-hydrologic events. This tool was developed to calculate the probability of specific meteo-hydrologic data, such as rainfall and discharge, which may be retrieved from other database. The Gumbel and Log Pearson Type III distributions were adopted because these methods are in general used all over the world. Input data of hydrologic events are encoded directly on the form of this tool, and can also be read from other file. In the database, in addition, it is possible to print out the results of the probability analysis with log-normal probability paper with plotting position by Hazen formula.

Chapter 9 - Maintenance - describes the matters to be noted to manage and maintain the database system in the future. The database system and its equipment such as hardware, software and other materials are to be transferred to NWRB after the completion of the Study. Thus, these will have to be managed and maintained by NWRB for the future use. Especially, it is recommended that users should take a backup to the other media such as external harddisk, floppy disk regularly in order to safeguard the files against unexpected loss.

## 1.2 What's Database Objects ?

In this section, the basic database objects are explained to aid your understanding in this manual. The database file (\*.mdb) consists of database objects such as Tables, Queries, Forms, Reports, Macros and Modules.

### : Tables

A table is a collection of data about a specific topic, such as products or suppliers. Using a separate table for each topic means you store that data only once, which makes database more efficient and reduces data-entry errors. Tables organize data into columns (called fields) and rows (called records).

### : Queries

Queries are used to view, change, and analyze data in different ways. And it is also used as the source of records for forms and reports. The most common type of query is a select query. A select query retrieves data from one or more tables using specified criteria.

### : Forms

Forms are used for a variety of purposes. Most of the information in a form comes from an underlying record source. Other information in the form is stored in the form's design. The link between a form and its record source is created by using graphical objects called controls. The most common type of control used to display and enter data is a text box.

### : Modules (Event procedures)

A module is a collection of Visual Basic for Applications declarations and procedures that are stored together as a unit. There are two basic types of modules: class modules and standard modules. Each procedure in a module can be a Function procedure or a Sub procedure.

### : Text Box

Use to display, enter, or edit data in a form's underlying record source, display the results of a calculation, or accept input from a user.

### : List Box

Displays a scrollable list of values. In Form view, user can select from the list to enter a value into a new record or to change the value in an existing record.

### : Combo Box

Combines the features of a list box and a text box. User can type in the text box or select an entry in the list box to add a value to an underlying field.

### : Option Button

Use as a stand-alone control bound to a Yes/No field, an unbound control for accepting user input in a custom dialog box, or part of an option group.

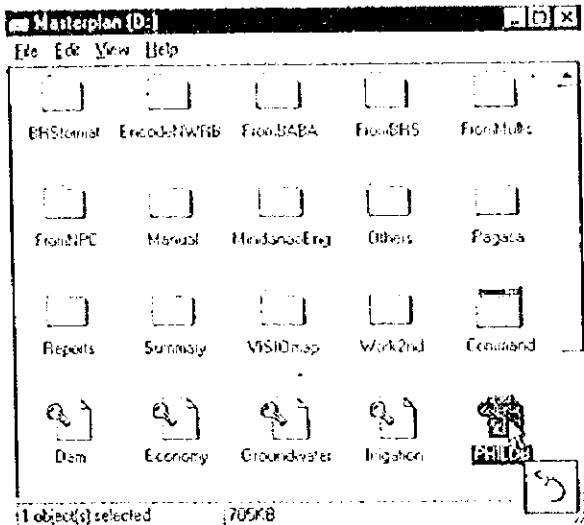
### : Check Box

Use as a stand-alone control bound to a Yes/No field, an unbound control for accepting user input in a custom dialog box, or part of an option group.

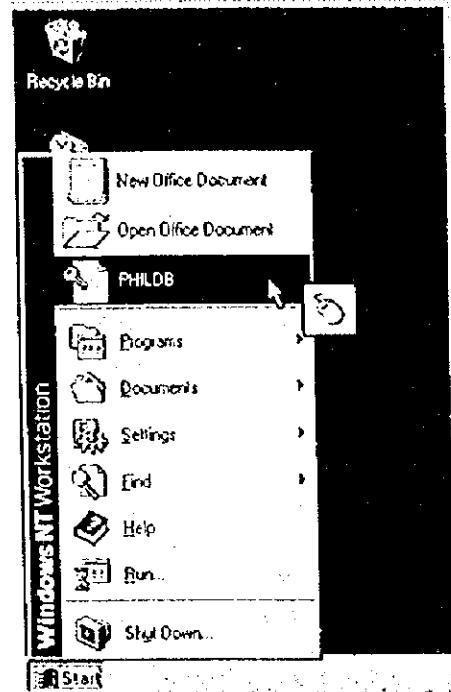
### : Command Button

Use to perform actions, such as finding a record, printing a record, or applying a form filter.

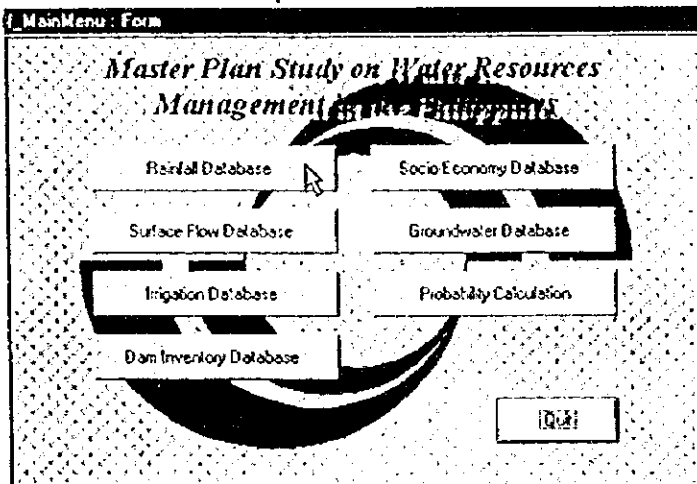
### 1.3 Starting PHILDB



On the window of hard disk drive which was placed PHILDB, double-click the icon.



Click the Start Button, and then click 'PHILDB'.



On the window (called main menu) that appears, you can start to use each database by clicking Command Button.

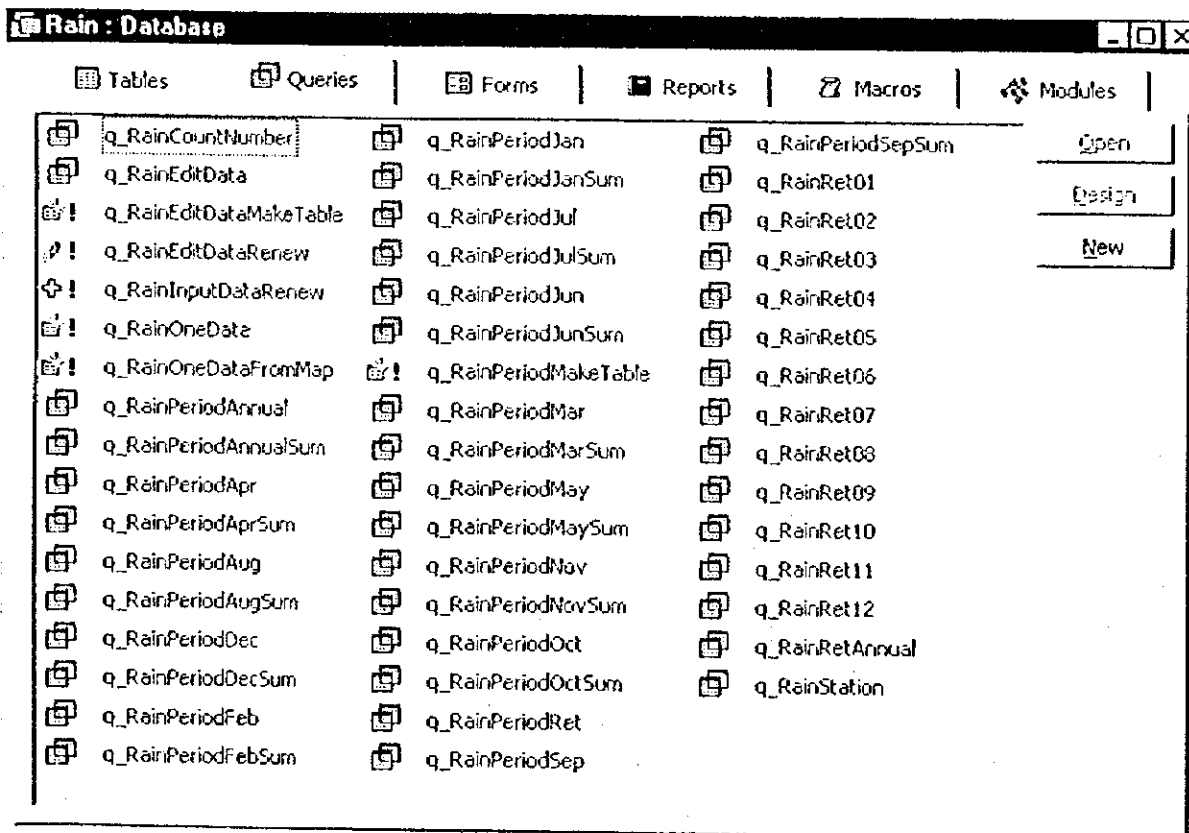
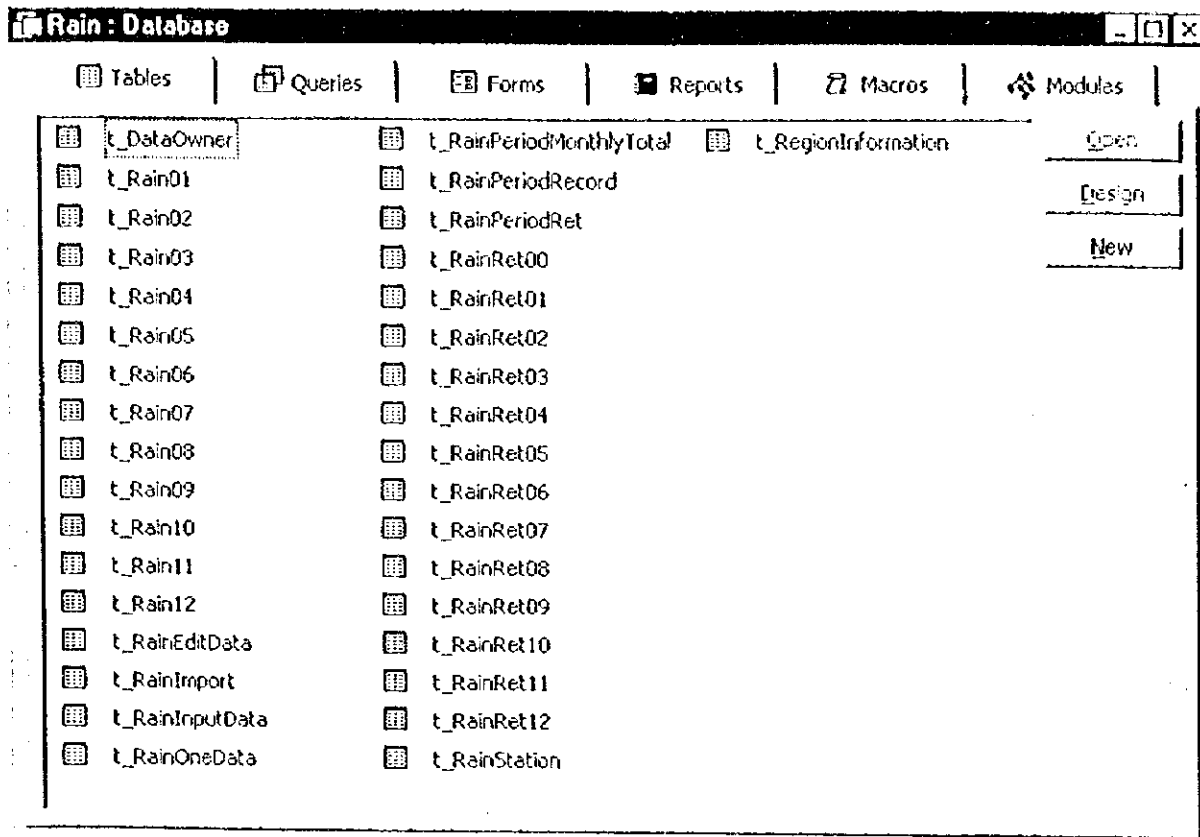
Chapter 2

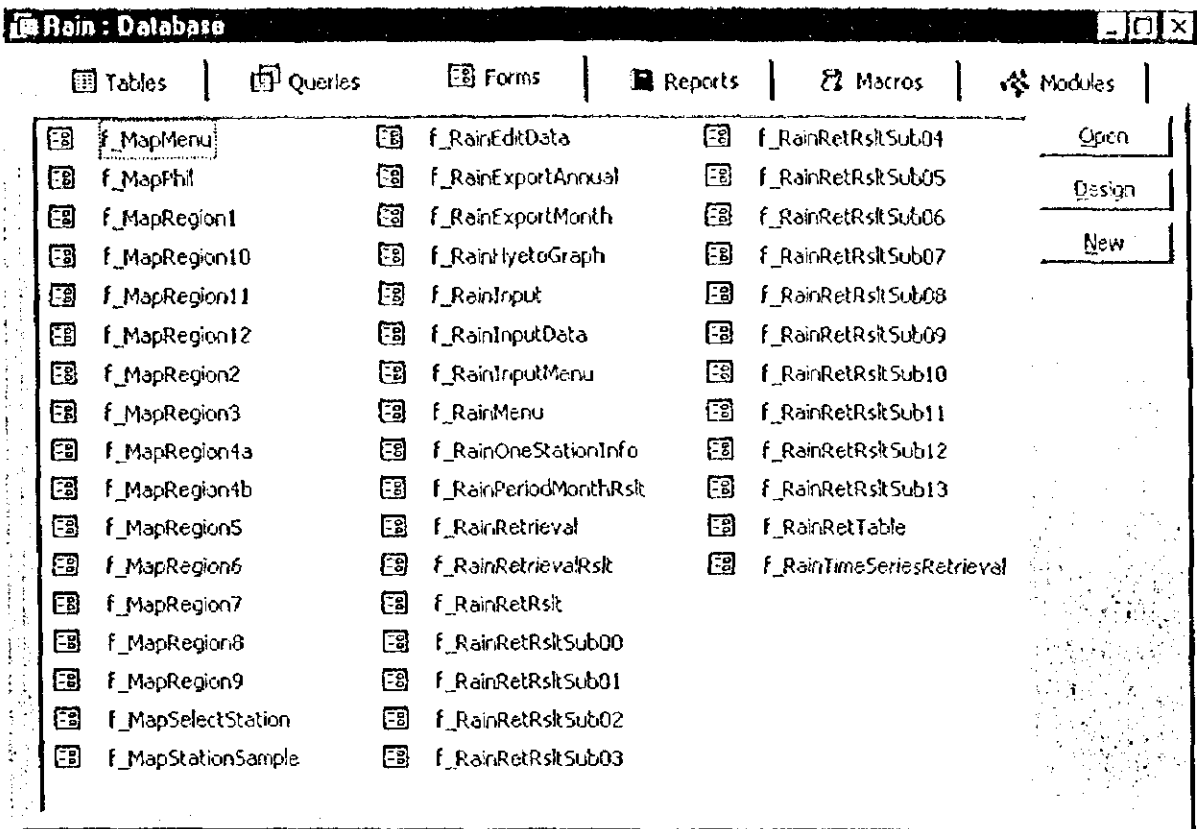
# Rainfall Database

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## 2.1 Database Components

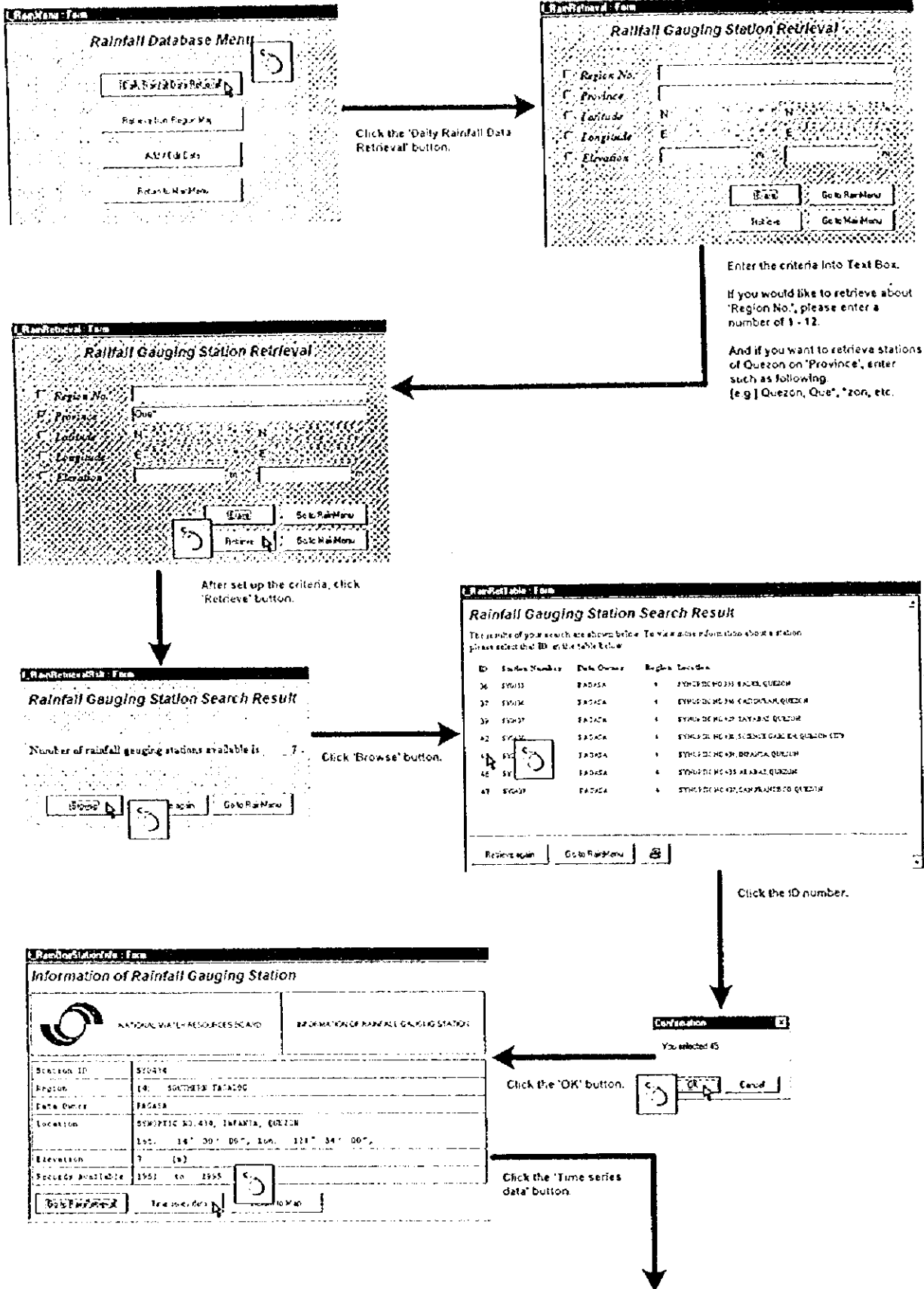




## 2.2 Daily Rainfall Data

### 2.2.1 How to Retrieve

#### 1) Using Retrieval Menu



**Rain Period Monthly Form**

### Retrieve Rainfall Time Series Data

Please enter the year or the range of years for which you would like to retrieve data. Be found in which you would like the output, and whether you want the range to be in a single year. After you have entered the data range and options, please click Retrieve data to receive the data.

Station Name: SYNOPSIS NO 434, PIFANTA, OREGON  
 Station ID: SYD434      Period of Record: 1961 to 1995  
 Water Resources Region: 4      Data Owner: PAGASA

Retrieve an annual table data  
 Year:

Retrieve monthly time data  
 Range of years:  to

If you want monthly data, enter the period into the Text Box of 'Range of years'.

If you need daily data, enter the year into the Text Box of 'Year'.

**Rain Period Monthly Form**

### Retrieve Rainfall Time Series Data

Please enter the year or the range of years for which you would like to retrieve data. Be found in which you would like the output, and whether you want the range to be in a single year. After you have entered the data range and options, please click Retrieve data to receive the data.

Station Name: SYNOPSIS NO 434, PIFANTA, OREGON  
 Station ID: SYD434      Period of Record: 1961 to 1995  
 Water Resources Region: 4      Data Owner: PAGASA

Retrieve an annual table data  
 Year:

Retrieve monthly time data  
 Range of years: 1961 to 1995

Click 'Retrieve data' button.

**Rain Period Daily Form**

### Retrieve Rainfall Time Series Data

Please enter the year or the range of years for which you would like to retrieve data. Be found in which you would like the output, and whether you want the range to be in a single year. After you have entered the data range and options, please click Retrieve data to receive the data.

Station Name: SYNOPSIS NO 434, PIFANTA, OREGON  
 Station ID: SYD434      Period of Record: 1961 to 1995  
 Water Resources Region: 4      Data Owner: PAGASA


Retrieve an annual table data  
 Year: 1993

Retrieve monthly time data  
 Range of years:  to

Click 'Retrieve data' button.

**Rain Period Monthly Form**

### Result of Rainfall Data Retrieval

 NATIONAL WATER RESOURCES BOARD      MONTHLY RAINFALL TABLE


STATION ID: SYNOPSIS NO 434, PIFANTA, OREGON  
 PERIOD OF RAINFALL RETRIEVAL: 1961 to 1995  
 TOTAL RAINFALL SUMMARY IN INCHES

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1961	20.8	26.8	48.1	36.1	27.9	6.9	24.2	53.7	49.8	7.3	49.4	49.2	484.2
1962	48.4	69.4	89.4	81.2	87.1	34.8	33.2	67.3	39.2	64.3	52.3	289.4	789.4
1963	48.2	26.8	18.4	13.8	65.3	61.3	14.8	17.2	29.2	51.8	25.4	76.1	382.8
1964	24.1	21.1	42.8	26.8	10.2	21.2	14.8	6.6	15.8	24.2	66.2	48.2	401.2
1965	48.4	13.2	17.4	21.8	63.1	42.4	27.2	24.8	10.2	11.1	61.4	44.1	389.1
1966	14.1	11.2	40.2	2.8	61.3	7.3	21.8	38.1	24.8	34.8	114.8	66.1	481.2
1967	24.4	23.1	14.8	21.8	3.8	63.1	17.1	11.8	21.8	28.1	46.2	74.8	312.1
1968	14.1	12.2	14.8	14.8	63.1	24.7	6.2	6.2	14.2	46.2	79.8	10.2	218.8
1969	46.1	49.1	11.2	61.1	17.2	61.3	24.2	24.7	24.2	14.2	61.2	61.2	348.8
1970	24.1	17.4	11.2	14.8	14.8	21.2	11.1	14.2	17.1	21.8	24.8	19.2	189.4
1971	31.1	46.1	42.8	14.1	14.1	61.1	21.2	61.2	61.2	61.1	61.2	121.1	666.2
MEAN	31.9	30.7	44.2	46.8	33.1	21.7	21.1	31.1	31.9	31.1	44.2	31.9	371.1

NOTE: Blank means that the data are not available.

**Rain Period Daily Form**

### Result of Daily Rainfall Data Retrieval

 NATIONAL WATER RESOURCES BOARD      DAILY RAINFALL DATA TABLE

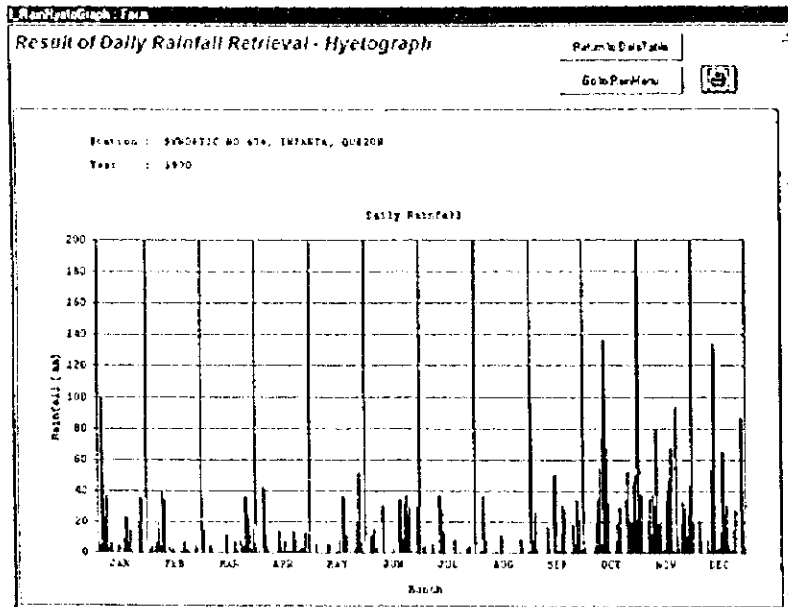
STATION ID: SYNOPSIS NO 434, PIFANTA, OREGON  
 PERIOD OF RAINFALL RETRIEVAL: 1993  
 MONTHLY RAINFALL SUMMARY IN INCHES

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





On the form of search result, you can get annual hyetograph when you click this (DrawGraph) button.

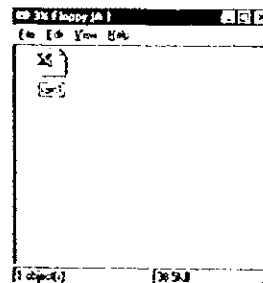


On the forms of search result, you can export to other file format when you click this (ExportData) button.

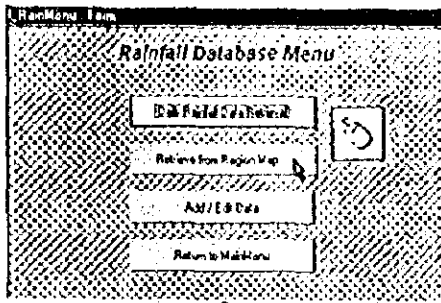
Enter the file name and folder (directory) which you want to place.

When you want to be exported by the name, rain1, in the A drive, it inputs like this example.

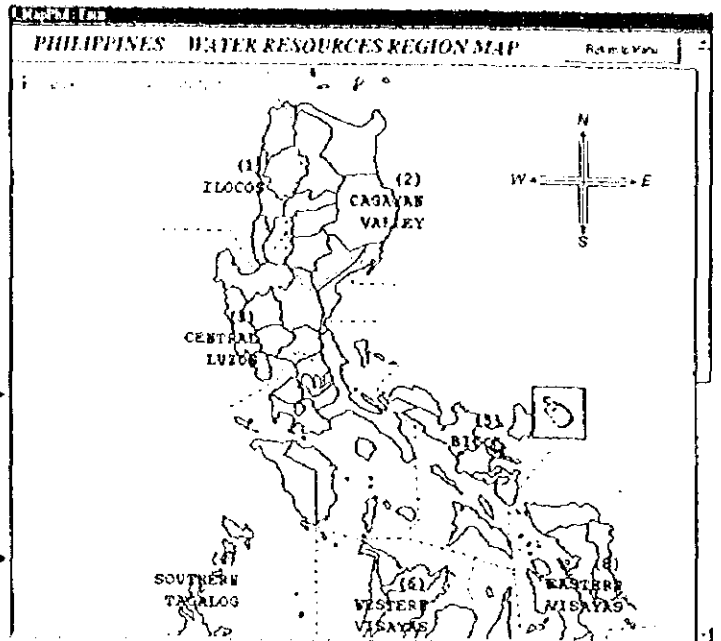
Insert the diskette into floppy drive, and then click a button of file format which you want to export.



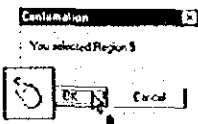
2) Using Retrieval Map



Click the 'Retrieve from Region Map' button.



Click a region name (blue character).





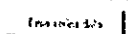
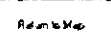
Click 'OK' button.



Click a rainfall gauging station button (light blue color).

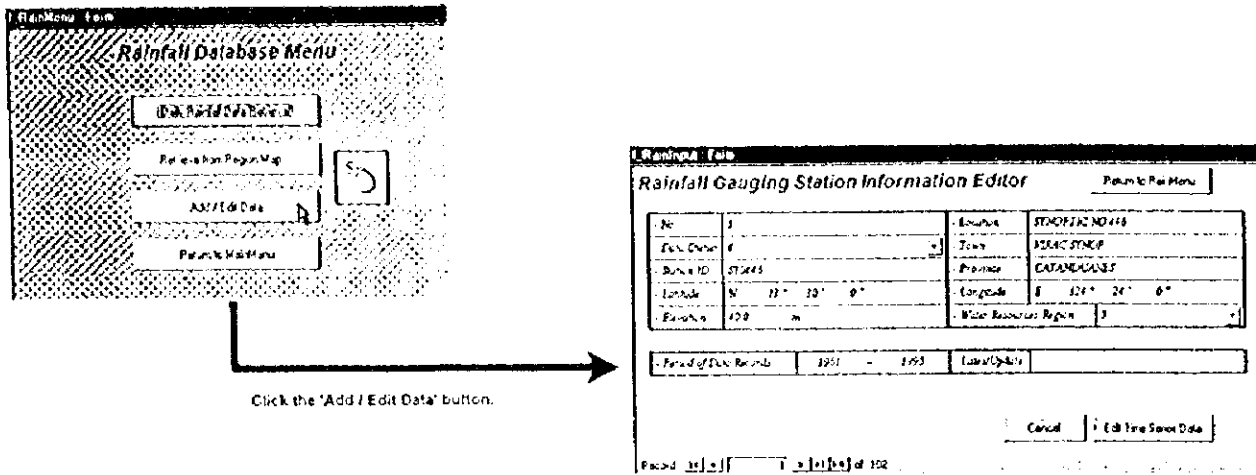
Streamflow gauging station button (red color) is not available when you are searching a station for rainfall data.

Information of Rainfall Gauging Station

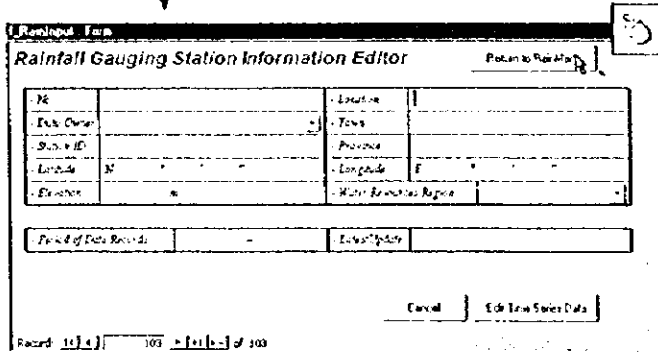
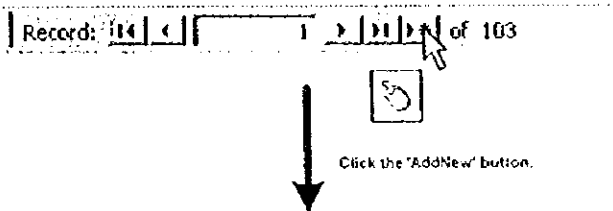
 NATIONAL WATER RESOURCES BOARD		INFORMATION OF RAINFALL GAUGING STATION
Location ID	575440	
Region	5) BICOL	
Date Owned	PATASIA	
Location	SYNOPTIC 39.840, EAST, CAGAYAN BIGHT	
Elevation	4 (m)	
Records Available	1968 to 1995	
		

After this, you are possible to advance in the way of '1) Using Retrieval Menu'

2.2.2 How to Add / Edit



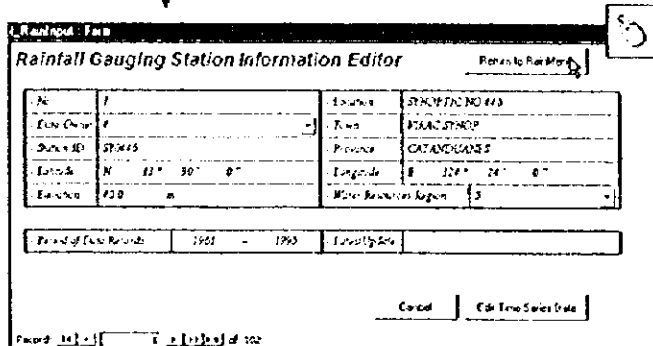
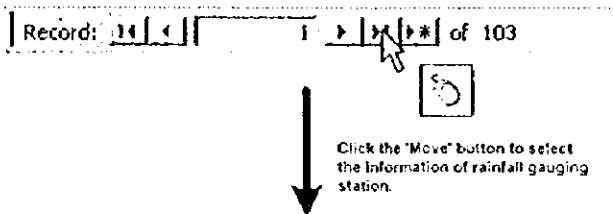
1) Add New Information of Rainfall Gauging Station



Enter the information of rainfall gauging station such as Location, Town, Province, Data Owner, StationID, Latitude, Longitude, Elevation, Water Resources Region.

After that, click 'Return to RainMenu' button.

2) Edit the Information of Rainfall Gauging Station



Enter the information which you want to edit, and then click 'Return to RainMenu' button.

### 3) Add New Daily Rainfall Data

**Rainfall Form**  
**Rainfall Gauging Station Information Editor** Return to Previous

No.	1	Location	SYNCHRO NO 114
Date Created	4	Town	MIRACOMAP
Station ID	ST0416	Province	CATANDUANS
Latitude	N 11° 33' 0"	Longitude	E 124° 24' 0"
Elevation	100 m	Water Resource Region	3

Period of Data Records: 1991 - 1993    Look Up:

Buttons:

Record 1 of 1    Page 1 of 1 of 102

On the rainfall gauging station which you want to add data, click the 'Edit Time Series Data' button.

**RainfallNew Form**  
**Rainfall Time Series Data Editor**

Station ID: ST0416

Water Resource Region: 3

Period of Data Records: 1991 - 1993

Input new data:  Year:

Buttons:

Click the Option Button of Input new data.

**RainfallNew Form**  
**Rainfall Time Series Data Editor**

Station ID: ST0416

Water Resource Region: 3

Period of Data Records: 1991 - 1993

Input new data:  Year: 1995

Buttons:

Enter the year into Text Box of 'Year'.

However you can enter the immediately previous or next year of data records. For example, if period of data records is 1991-1995, '1990' and '1996' are available.

And then click 'Go' button.

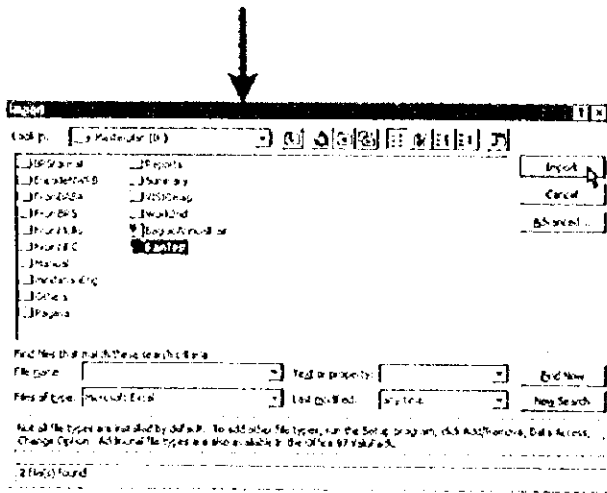
**RainfallData Form**  
**Rainfall Time Series Data Editor** Read from File    Return Data Now    Exit

Station ID: ST0416    Year: 1996

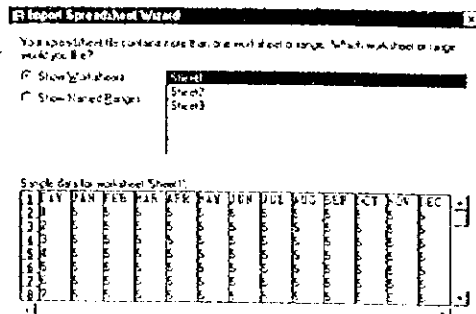
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
2	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
3	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
4	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
5	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
6	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
7	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
8	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
9	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
10	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
11	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
12	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
13	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
14	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
15	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
16	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
17	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
18	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
19	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
20	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
21	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
22	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
23	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
24	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
25	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
26	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
27	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
28	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
29	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
30	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
31	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1

Enter the daily rainfall data. When you encoded data, it will change to the red character.

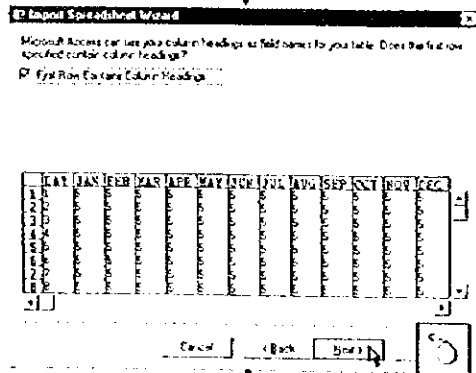
If you want to read data from other file, click the 'Read from File' button.



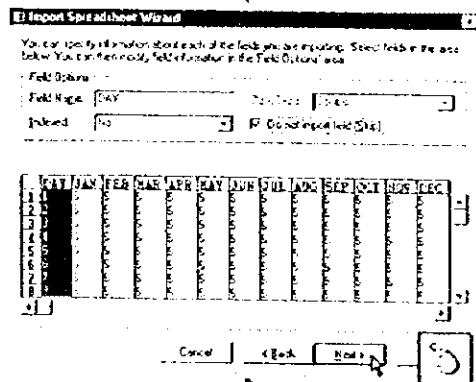
Select the file which you want to open, and then click 'Import' button.



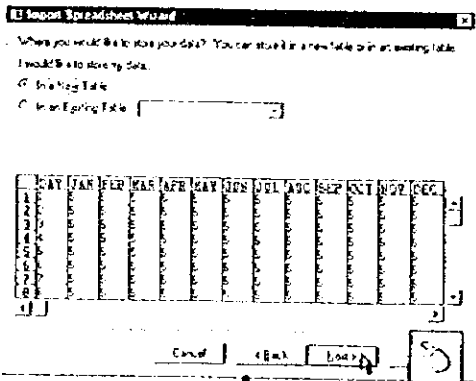
Select the Option Button of 'Show Worksheets', and then click 'Next >' button.



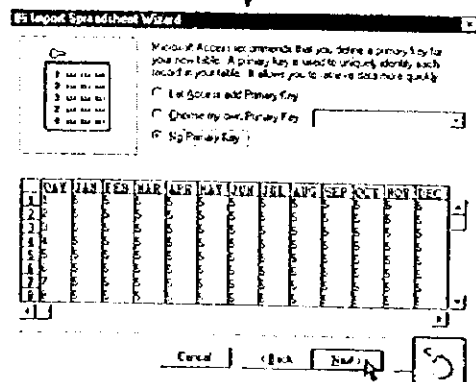
If there are name of month in the first row of sheet, you have to click the Check Box of 'First Row Contains Column Headings'. And then click 'Next >' button.



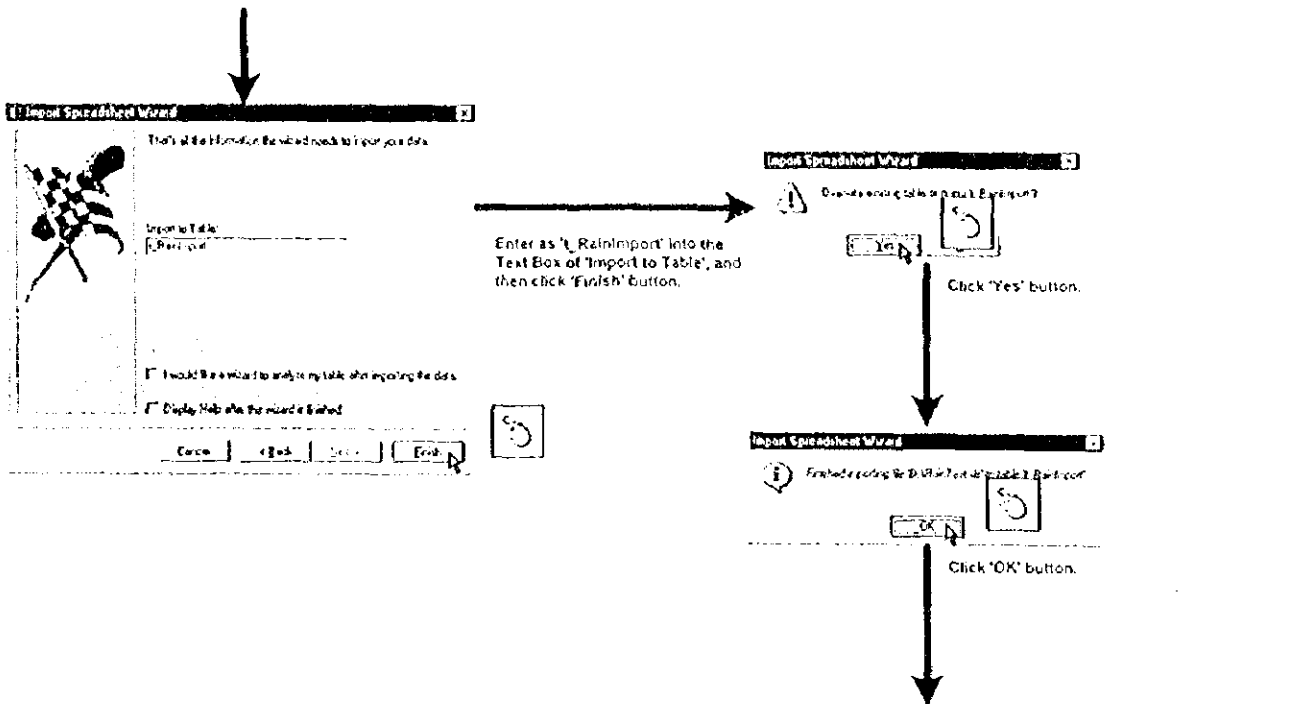
If there are number of day in the sheet, you have to click the Check Box of 'Do not import field (Skip)'. And then click 'Next >' button.



Select the Option Button of 'In a New Table', and then click 'Next >' button.



Click Option Button of 'No Primary Key', and then click 'Next >' button.



Enter as 'RainImport' into the Text Box of 'Import to Table', and then click 'Finish' button.

Click 'Yes' button.

Click 'OK' button.

RainImport.xls - Rain

### Rainfall Time Series Data Editor

Station ID : ST0445

Year : 1996

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0

After read or encoded data, click the 'Entry New Data' button.

Rainfall - Form

### Rainfall Gauging Station Information Editor

Station ID: ST0445

No.	1	Latitude	10° 24' 00" N
Data Owner	1	Zone	WAC STADP
Station ID	ST0445	Province	CAPANGKANE
Latitude	N 10° 24' 00"	Longitude	E 120° 24' 00"
Remarks	120	Water Resources Agency	1

Period of Data Records: 1961 - 1996

Inspector: 100197

Buttons: Cancel, Entry New Data

In the information of 'Period of Data Records', the year was changed from 1961-1996 to 1961-1996.

4) Edit Daily Rainfall Data

**Rainfall Form**  
**Rainfall Gauging Station Information Editor**      Return to Form Menu

No.	1	Location	SYNOPTIC NO 445
File Code	4	Form	STATIONFORM
Station ID	SY0445	Province	CATANDUAS
Latitude	N 13° 30' 0"	Longitude	E 124° 24' 0"
Elevation	720 m	Water Resource Region	3

Period of Data Record: 1951 - 1993      Last Update

Cancel      Edit Time Series Data

Click the 'Edit Time Series Data' button.

**Rainfall Form**  
**Rainfall Time Series Data Editor**

Station ID: SY0445  
 Water Resource Region: 3  
 Period of Data Record: 1951 - 1993  
 Input new data:      
 Edit existing data:      
 Return Station Editor

Click the Option Button of 'Edit existing data'.

**Rainfall Form**  
**Rainfall Time Series Data Editor**

Station ID: SY0445  
 Water Resource Region: 3  
 Period of Data Record: 1951 - 1993  
 Input new data:      
 Edit existing data:          Target Year: 1963  
 Return Station Editor

Click the right edge of Combo Box of 'Target Year', and then click a year which you want to edit.

**Rainfall Form**  
**Rainfall Time Series Data Editor**

Station ID: SY0445  
 Water Resource Region: 3  
 Period of Data Record: 1951 - 1993  
 Input new data:      
 Edit existing data:          Target Year: 1963  
 Return Station Editor

1951  
1962  
1963  
1964  
1965  
1966  
1967

Click 'Go' button.

**Rainfall Form**  
**Rainfall Time Series Data Editor**      Return to Form Menu      Edit, Edit Time Series Data

Station ID: SY0445      Year: 1968

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	23.7	0.5	0	0	0	0	17.7	0	0	0	0	0
2	2	0	0	0	0	0	1	63.8	0	0	0	0
3	0	5.5	0	0	0	0	0.5	2.5	0	6.4	0	30.3
4	0	0.3	1.3	0.3	2	0	5.1	7.3	0	3.7	0	0.3
5	3.6	1.5	0	0.5	0	0	8.6	0	0	38.1	0	0
6	0.8	0	1.6	2.6	0.3	3.1	0	2	0	1.6	6.6	0
7	0	0	4.8	0	0.6	0	0	2.3	0	0	0	1.5
8	4.6	0	23.7	0	0	11	1.8	2	0	6.1	0	1.3
9	3.4	0	13.7	0	0.3	0.5	0	17.5	1	16.8	0	6.6
10	0	1.5	0.3	0.3	0	0	1.3	0	4.3	15.8	58.5	0.8
11	0	3.1	26.5	0.5	0.5	0	0	1.5	0.5	4.6	26	0
12	3.3	0	2.5	0	0	5.4	0	0	0	6.6	0	0
13	2.6	6.1	0	0	1.5	1.5	4.6	3.6	23.4	1.6	0	6.3
14	0.3	0	1.6	0	1.5	6.4	0	0	0	8.6	0	0
15	4.1	0	0.8	0	4.4	0	0.2	1	35.3	66.6	0.3	0
16	0	0	0.3	0	0	0	0.8	4.6	0.3	5.8	2.3	1
17	0	0	0	0	0	49	0	0	0	0	0	0
18	0.5	0	0	0	0	0	0.8	6.6	0	1.5	14.9	0.5
19	0	0	0	0	0	0	0.8	6.6	0	2.3	37.4	0
20	0	0	0	0	2.8	0	0.3	17.5	19.5	0	20.6	0
21	0	1.3	0.5	0	0	2.5	0.3	0	0	0	10.9	0
22	0	2	1	0	0	0	0	0	0	0	0	3.8
23	0	0.7	2.8	0	11.7	0	0.5	0	4.3	0	0.3	2
24	0	0	0.3	4.3	0	0	5.4	0	0	0	15.5	0.6
25	0	0	1.8	0.5	2.5	29.2	1	0	7.4	0	18	0
26	0	10.1	0.8	0	0	0	0	0	21.6	0	1.5	1
27	12.5	0	0.8	0	0	0	0	0	168.1	0	0	2
28	52.7	0.2	0	1.3	0	5.3	0	0	2	0	4.3	0.6
29	56	0.3	0	0	0	3.6	0	0	0	0	8.2	0.3
30	16	0	0	1.5	3.3	0	0	0	0	0	0	0.3
31	3.4	0	0	0	0	2.5	0	0	0	0	0	0
32	2.4	0	0	0	0	0	0	0	0	0	0	0

Edit daily rainfall data. Edited data will change to the red character.

After edited, click the 'Entry Edited Data' button.

5) Add New Information of Rainfall Gauging Station on Regional Map

On the menu bar, click Window, and then click Unhide.

Select the 'PHIDB : Database', and then click 'OK' button.

If you want to add new station in Region 1, open the form of 'Y\_MapRegion1' as design mode.  
You should make tentative copy to safeguard original file against unfavorable change.

Select 'Y\_MapRegion1', click the right mouse button, point to Copy, and then click it.

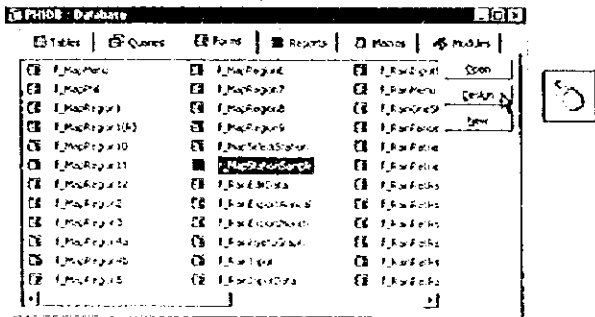
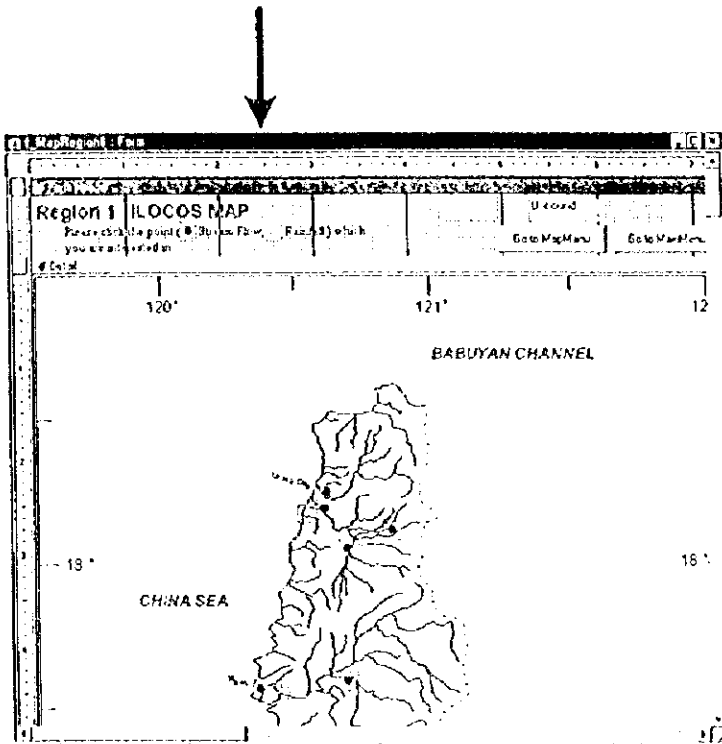
Select the empty part of window, click the right mouse button, and then click Paste.

Enter the Form Name.

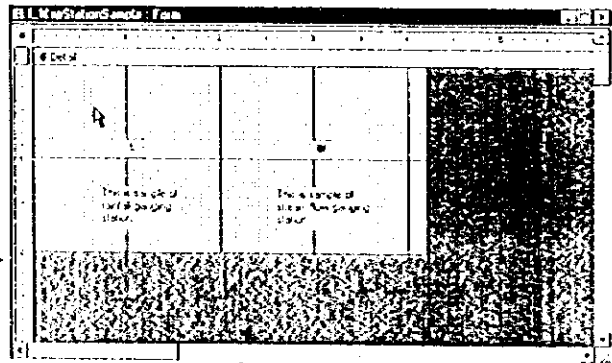
Click 'OK' button.

Select 'Y\_MapRegion1', and then click 'Design' button.

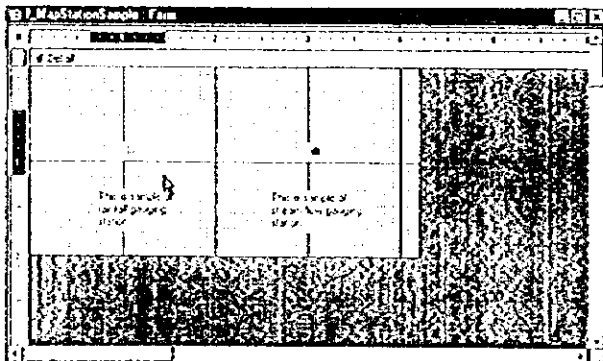




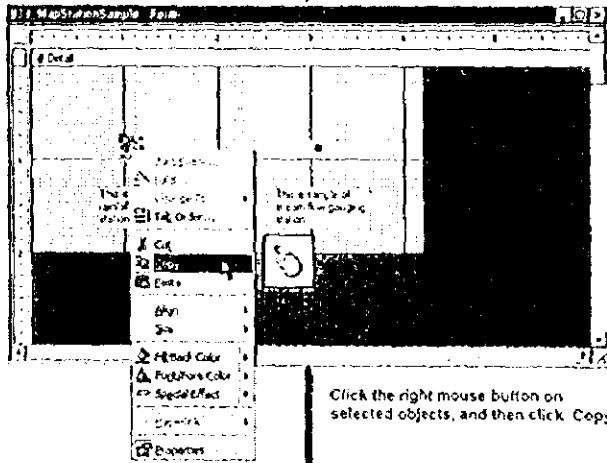
On the Database Window, select 'Form1', and then click 'Design' button.



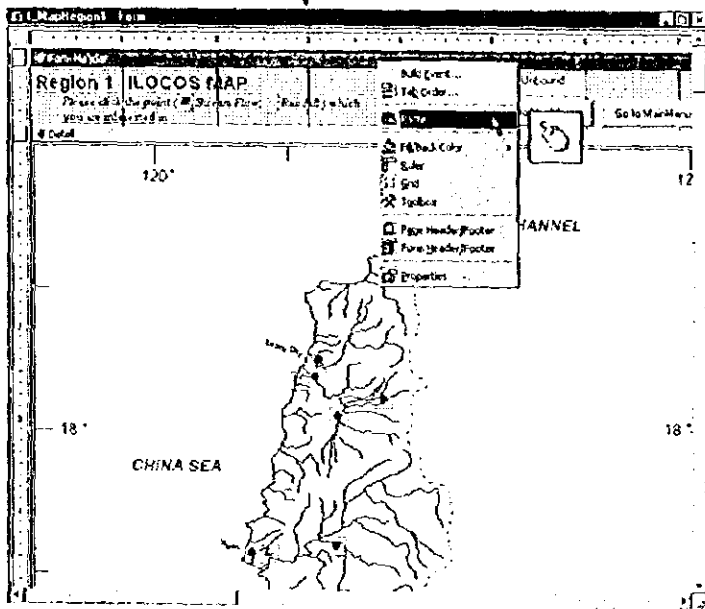
To select objects for rainfall gauging station, press and hold down the left mouse button, and point to where you want the objects.



And then release the mouse button.

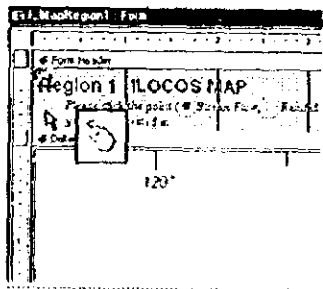


Click the right mouse button on selected objects, and then click Copy.

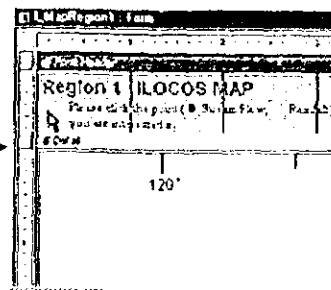


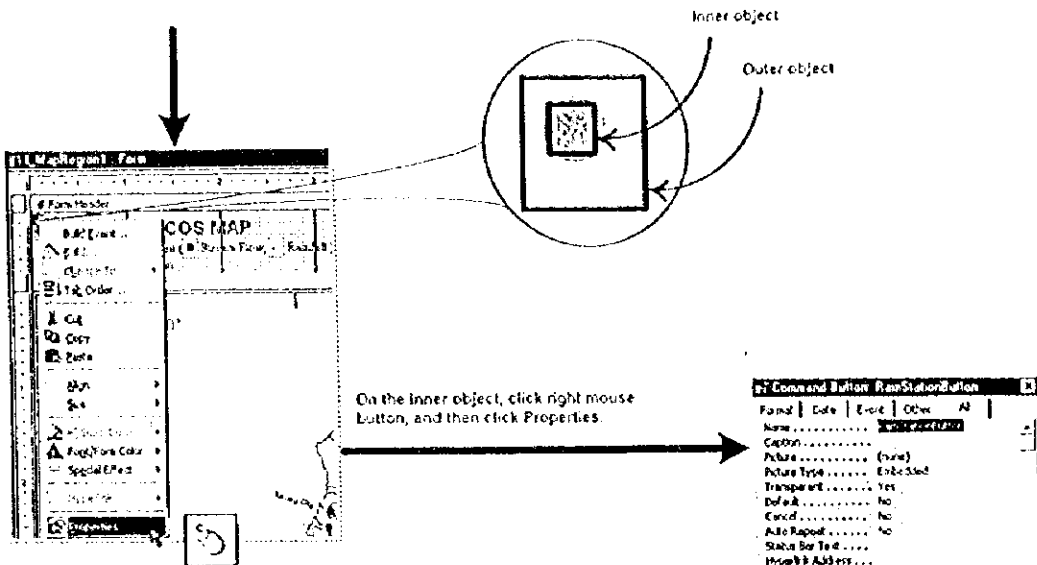
On the window of 'MapRegion1', select the Form Header, and click the right mouse button, and then click Paste.

The objects will appear in the upper left corner.



Click the empty part of window.

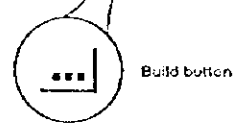




Put the object's name into Text Box of 'Name'.  
 If the station which you want to add is PAGASA synoptic no. 213, you should put a unique name such as 'Pagasa213Button'.

And enter the location as follows into Text Box of 'ControlTip Text'.  
 [e.g.] PAGASA SYNOPTIC STATION NO 213

On the Combo Box of 'On Click', select the '[Event Procedure]', and then click 'Build' button.



```

Form1_MapRegion1 Class Module
Pagasa213Button
Option Compare Database
Option Explicit

Private Sub GoToRainMenuButton_Click()
    DoCmd.Close acForm, "f_RainRegion1", acSaveNo
    DoCmd.OpenForm "f_RainMenu"
End Sub

Private Sub GoToMapMenuButton_Click()
    DoCmd.Close acForm, "f_RainRegion1", acSaveNo
    DoCmd.OpenForm "f_RainPhi1"
End Sub

Private Sub Pagasa213Button_Click()
End Sub
    
```

```

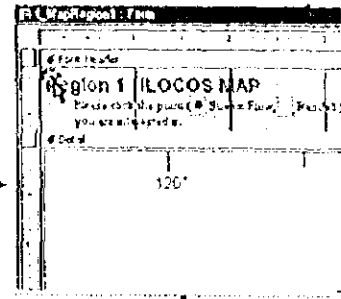
Private Sub Pagasa213Button_Click()
    If Forms!f_MapSelectStation!DataType = "RF" Then
        Forms!f_MapSelectStation!st_id = 100
        DoCmd DeleteObject acTable, "t_RainOneData"
        DoCmd OpenQuery "q_RainOneDataFromMap"
        DoCmd OpenForm "f_RainOneStationInfo"
        DoCmd Close acForm, "f_MapSelectStation", acSaveYes
        DoCmd Close acForm, "f_MapRegion1"
    End If
End Sub
    
```

On the Class Module, encode the left example.  
 In the 'st\_id' of left example, you must put the number which was given in 'Y\_RainInput' (refer to page 13) because 'st\_id' is corresponding to 'No' of 'Y\_RainInput'.  
 And if you are editing about region2, you must replace 'f\_MapRegion1' with 'f\_MapRegion2'.

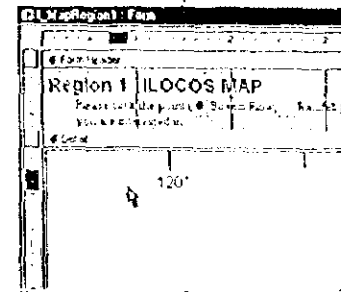
```

Form1_MapRegion? Class Module
Private Sub Page2113Button_Click()
Option Compare Database
Option Explicit
Private Sub GoToMapMenuButton_Click()
DoCmd.Close acForm, "f_MapRegion?", acSaveNo
DoCmd.OpenForm "f_MapRegion"
End Sub
Private Sub GoToMapMenuButton_Click()
DoCmd.Close acForm, "f_MapRegion?", acSaveNo
DoCmd.OpenForm "f_MapRegion"
End Sub
Private Sub Page2113Button_Click()
If Forms(f_MapRegion).DateType = "YR" Then
Forms(f_MapRegion).ac_id = 100
DoCmd.SelectObject acTable, "t_RainOneData"
DoCmd.OpenQuery "q_RainOneDataFromMap"
DoCmd.OpenForm "f_RainOneStationInfo"
DoCmd.Close acForm, "f_MapRegion?", acSaveNo
DoCmd.Close acForm, "f_MapRegion"
End If
End Sub
    
```

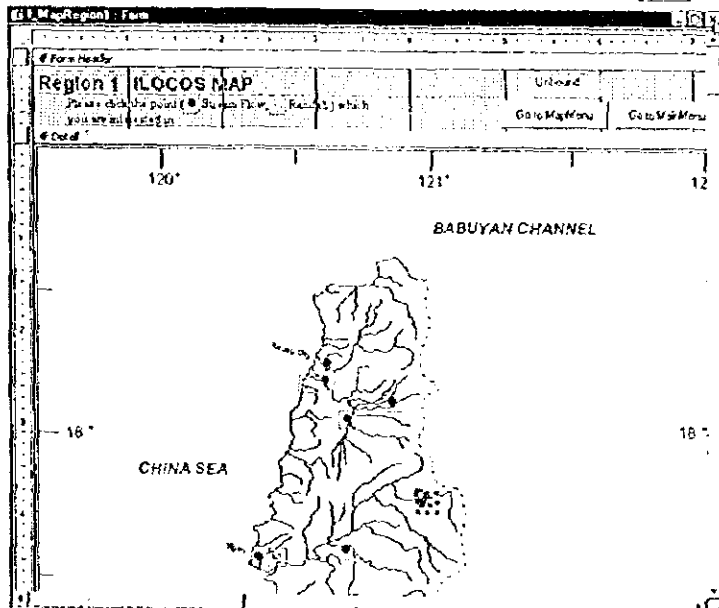
After encoded, click the 'Close' button.



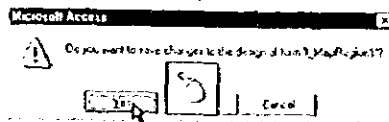
Select two objects in the upper left corner.



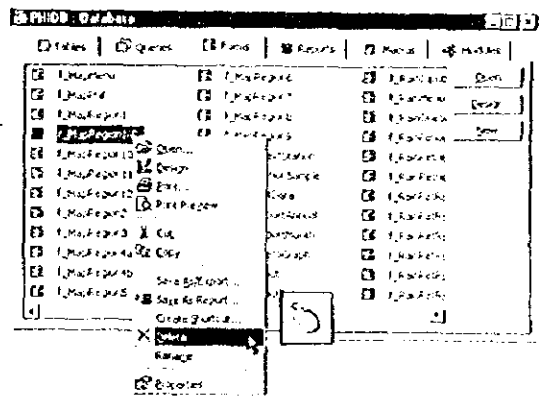
Press and hold down the left mouse button, and point to where you want to place, then release the mouse button.



Click the 'Close' button.



Click 'Yes' button.




Select the 'f\_MapRegion?(R)', click the right mouse button, and then click Delete.

And click the 'Close' button.


2.3 Output Samples

1) Monthly Rainfall Data Table

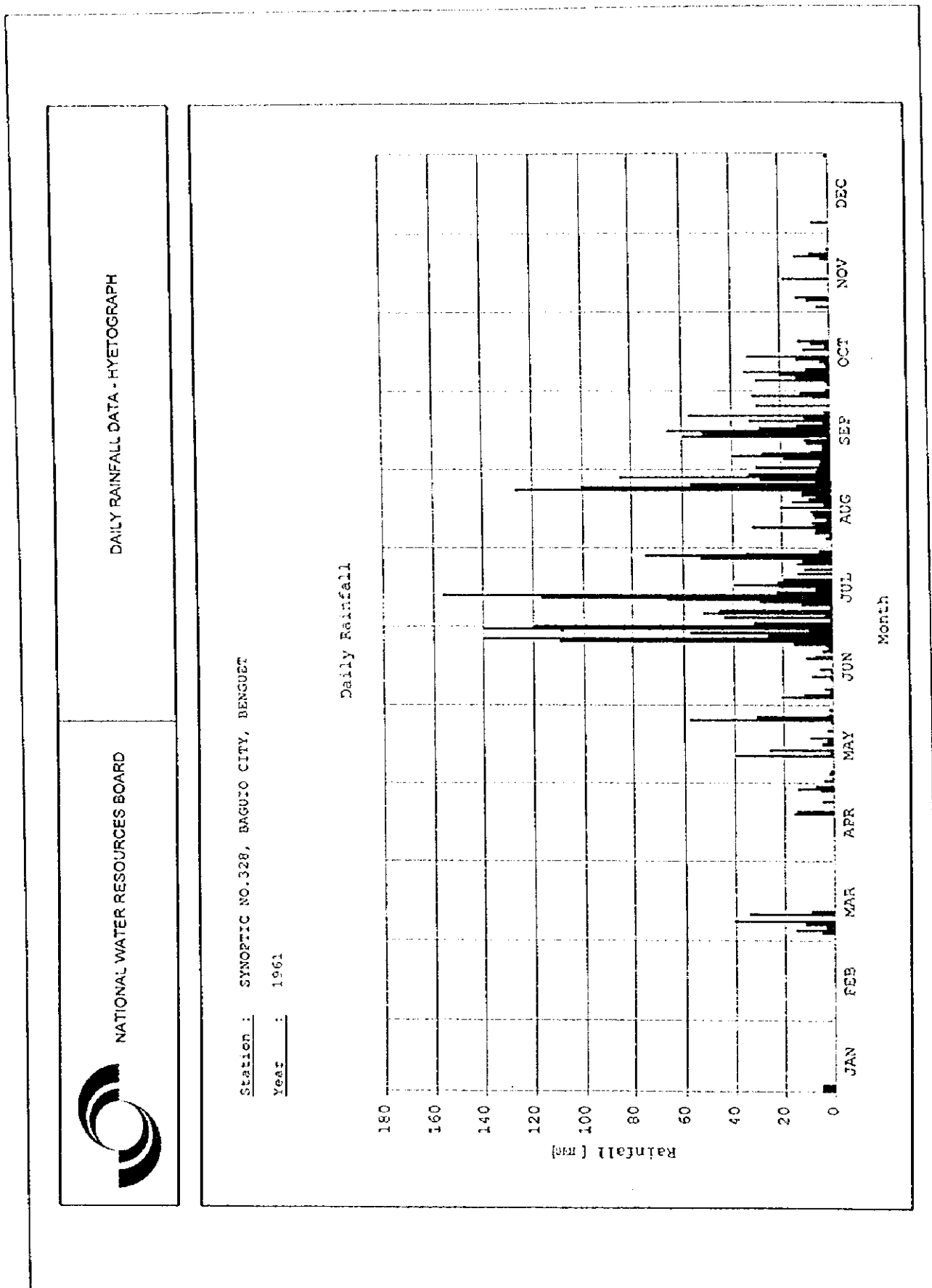
		NATIONAL WATER RESOURCES BOARD											MONTHLY RAINFALL TABLE
STATION NAME : SYNOPTIC NO.328, BAGUIO CITY, BENGUET													
PERIOD OF TARGET YEARS : 1961 to 1995													
TOTAL MONTHLY RAINFALL, IN MILLI METER													
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1961	15.0	0.0	119.8	63.0	189.8	575.1	1025.8	811.8	565.5	196.8	72.1	7.6	3442.0
1962	3.3	0.0	9.2	92.9	264.0	185.1	1248.3	694.4	832.7	154.3	29.6	7.9	3522.7
1963	8.6	4.3	9.8	7.8	125.5	1092.5	489.8	383.8	1457.8	76.2	41.8	46.1	3745.0
1964	3.2	0.8	18.8	158.4	233.1	520.4	299.9	1871.9	572.3	443.7	202.8	143.6	4469.1
1965	2.6	22.4	118.6	290.1	458.9	503.3	712.6	371.3	364.8	106.6	24.5	0.0	2956.7
1966	18.8	8.9	45.3	26.8	764.3	241.8	374.3	601.6	956.7	63.1	175.4	37.1	3310.4
1967	1.8	4.6	12.1	230.9	187.9	1417.9	323.8	1141.1	443.3	1583.3	109.1	0.8	5443.8
1968	4.2	0.0	6.4	51.4	275.5	346.7	1043.7	1572.3	1450.8	31.2	18.6	0.0	4330.8
1969		0.8	7.2	85.8	344.0	352.3	1211.8	616.3	834.8	279.1	52.0	48.6	
1970	21.2	2.9	21.3	68.8	343.6	417.4	425.6	878.8	818.0	174.5	85.4	50.8	2861.6
1971	12.7	12.1	4.2	144.4	162.6	429.6	1321.1	756.8	385.5	326.4	66.7	48.8	3768.7
1972	18.8	1.8	12.3	83.2	328.3	455.4	4773.8	1543.8	331.3	50.8	48.5	25.6	7165.8
1973	8.6	0.0	1.1	51.5	106.2	372.5	418.7	537.4	225.2	816.2	54.4	13.5	2597.3
1974	20.1	0.0	7.4	97.2	272.4	549.7	383.5	1487.5	332.4	2273.5	638.1	48.7	6114.5
1975	17.1	0.0	2.3	57.8	215.2	224.4	152.5	787.8	477.4	295.5	27.5	43.1	2300.8
1976	21.8	0.0	38.7	21.4	1304.5	1224.8	377.3	877.0	373.0	176.3	81.5	7.5	4303.6
1977	30.2	0.0	5.8	30.8	264.8	159.3	694.5	784.2	1281.4	143.6	156.6	0.0	3676.5
1978	0.0	0.0	5.8	64.8	265.9	431.4	813.4	1412.9	583.9	344.8	20.0	28.7	3772.4
1979	13.0	1.4	1.4	117.1	410.1	239.1	586.7	1078.4	250.2	206.2	20.7	48.1	2972.4
1980	1.0	1.9	16.8	4.8	1040.4	88.3	1323.3	237.6	562.2	210.8	885.0	35.4	4407.5
1981	38.8	2.8	0.0	283.2	248.2	628.5	455.2	1165.4	614.7	126.3	206.4		
1982	0.5	22.7	21.5	163.2	228.9	340.0	1146.8	921.4	443.6	238.2	123.8	47.3	3702.8
1983	43.4	15.4	10.4	0.0	95.6	202.9	279.3	933.0	351.7	176.4	72.2	0.8	2218.1
1984	10.6	0.0	54.8	209.5	526.6	442.4	286.1	1512.5	357.7	322.4	17.3	2.3	3781.2
1985	7.4	46.0	57.5	218.7	419.7	1540.7	189.5	1424.8	512.1	265.2	76.3	15.4	4765.1
1986	18.2	11.0	8.7	3.6	531.1	226.4	1485.7	1258.1	1030.2	146.6	41.5	17.9	4737.0
1987	0.0	0.0	8.2	29.4	234.5	381.6	304.6	814.7	413.8	503.5	9.5	27.7	2727.6
1988	14.6	36.8	0.1	119.5	306.4	546.5	828.6	240.7	312.1	451.0	23.4	3.4	2983.2
1989	50.2	64.3	113.0	51.2	334.5	343.5	1968.8	506.0	1539.0	355.1	106.5	9.2	4970.1
1990	0.0	0.0	6.8	15.7	348.9	1088.1	565.0	1559.8	861.5	308.5	51.5	8.5	4873.5
1991	0.0		10.8	125.6	124.0	177.8	586.4	677.2	593.8	1735.3	15.5	1.2	
1992	8.1	0.4	87.8	23.8	483.2	317.6	473.4	1403.8	1611.5	118.5	21.0	0.6	4530.5
1993	2.0	3.6	4.0	88.4	37.8	1024.3	410.8	431.8	492.0	584.6	172.4	25.7	3277.8
1994	23.1	5.0	64.8	103.5	353.4	183.1	1191.2	723.7	178.4	114.4	9.7	3.7	2993.8
1995	0.0	4.4	0.0	32.3	227.2	151.1	470.3	704.7	288.9	139.1	102.7	59.7	2180.4
MEAN	12.6	8.0	26.3	88.8	345.2	500.8	803.1	906.0	649.2	382.0	110.5	25.2	3847.2

Note : Blank means that the data are not available

2) Daily Rainfall Data Table

	NATIONAL WATER RESOURCES BOARD	DAILY RAINFALL DATA TABLE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
<p>SYNOPTIC NO. 328, BAGUIO CITY, BENGUET</p> <p>LOCATION : Lat. 16° 30' 00", Long. 120° 36' 00"</p> <p>ELEVATION : meter</p> <p>RECORDS AVAILABLE : 1961 to 1995</p> <p style="text-align: center;">RAINFALL, IN MILLI METER</p> <p style="text-align: center;">1961</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>DAY</th> <th>JAN</th> <th>FEB</th> <th>MAR</th> <th>APR</th> <th>MAY</th> <th>JUN</th> <th>JUL</th> <th>AUG</th> <th>SEP</th> <th>OCT</th> <th>NOV</th> <th>DEC</th> </tr> </thead> <tbody> <tr><td>1</td><td>50</td><td>00</td><td>00</td><td>00</td><td>41</td><td>00</td><td>1126</td><td>00</td><td>305</td><td>15</td><td>00</td><td>00</td></tr> <tr><td>2</td><td>50</td><td>00</td><td>00</td><td>00</td><td>05</td><td>00</td><td>312</td><td>00</td><td>46</td><td>00</td><td>53</td><td>00</td></tr> <tr><td>3</td><td>50</td><td>00</td><td>53</td><td>00</td><td>00</td><td>208</td><td>08</td><td>00</td><td>41</td><td>05</td><td>00</td><td>00</td></tr> <tr><td>4</td><td>00</td><td>00</td><td>157</td><td>00</td><td>18</td><td>117</td><td>438</td><td>25</td><td>193</td><td>15</td><td>00</td><td>00</td></tr> <tr><td>5</td><td>00</td><td>00</td><td>36</td><td>00</td><td>13</td><td>10</td><td>28</td><td>93</td><td>308</td><td>297</td><td>08</td><td>66</td></tr> <tr><td>6</td><td>00</td><td>00</td><td>112</td><td>00</td><td>00</td><td>31</td><td>523</td><td>66</td><td>272</td><td>132</td><td>137</td><td>00</td></tr> <tr><td>7</td><td>00</td><td>00</td><td>431</td><td>00</td><td>00</td><td>00</td><td>455</td><td>61</td><td>79</td><td>203</td><td>00</td><td>00</td></tr> <tr><td>8</td><td>00</td><td>00</td><td>00</td><td>00</td><td>00</td><td>00</td><td>08</td><td>318</td><td>36</td><td>343</td><td>00</td><td>00</td></tr> <tr><td>9</td><td>00</td><td>00</td><td>00</td><td>00</td><td>00</td><td>00</td><td>124</td><td>88</td><td>33</td><td>97</td><td>00</td><td>00</td></tr> <tr><td>10</td><td>00</td><td>00</td><td>340</td><td>00</td><td>00</td><td>03</td><td>290</td><td>78</td><td>97</td><td>10</td><td>00</td><td>00</td></tr> <tr><td>11</td><td>00</td><td>00</td><td>94</td><td>00</td><td>394</td><td>86</td><td>663</td><td>18</td><td>137</td><td>15</td><td>00</td><td>00</td></tr> <tr><td>12</td><td>00</td><td>00</td><td>00</td><td>00</td><td>10</td><td>00</td><td>1165</td><td>66</td><td>13</td><td>41</td><td>00</td><td>00</td></tr> <tr><td>13</td><td>00</td><td>00</td><td>00</td><td>00</td><td>259</td><td>03</td><td>1557</td><td>74</td><td>597</td><td>135</td><td>183</td><td>00</td></tr> <tr><td>14</td><td>00</td><td>00</td><td>00</td><td>00</td><td>00</td><td>51</td><td>226</td><td>84</td><td>518</td><td>330</td><td>00</td><td>00</td></tr> <tr><td>15</td><td>00</td><td>00</td><td>00</td><td>00</td><td>43</td><td>00</td><td>69</td><td>00</td><td>658</td><td>00</td><td>00</td><td>00</td></tr> <tr><td>16</td><td>00</td><td>00</td><td>00</td><td>00</td><td>46</td><td>00</td><td>213</td><td>208</td><td>287</td><td>00</td><td>00</td><td>00</td></tr> <tr><td>17</td><td>00</td><td>00</td><td>00</td><td>00</td><td>20</td><td>00</td><td>391</td><td>30</td><td>132</td><td>109</td><td>00</td><td>00</td></tr> <tr><td>18</td><td>00</td><td>00</td><td>00</td><td>183</td><td>97</td><td>109</td><td>216</td><td>155</td><td>26</td><td>15</td><td>00</td><td>00</td></tr> <tr><td>19</td><td>00</td><td>00</td><td>00</td><td>150</td><td>00</td><td>71</td><td>198</td><td>89</td><td>325</td><td>74</td><td>00</td><td>00</td></tr> <tr><td>20</td><td>00</td><td>00</td><td>00</td><td>00</td><td>00</td><td>00</td><td>00</td><td>64</td><td>107</td><td>130</td><td>00</td><td>00</td></tr> <tr><td>21</td><td>00</td><td>00</td><td>00</td><td>00</td><td>20</td><td>41</td><td>140</td><td>118</td><td>572</td><td>00</td><td>36</td><td>00</td></tr> <tr><td>22</td><td>00</td><td>00</td><td>00</td><td>00</td><td>00</td><td>15</td><td>00</td><td>117</td><td>25</td><td>00</td><td>142</td><td>00</td></tr> <tr><td>23</td><td>00</td><td>00</td><td>00</td><td>46</td><td>00</td><td>28</td><td>312</td><td>1270</td><td>00</td><td>00</td><td>78</td><td>00</td></tr> <tr><td>24</td><td>00</td><td>00</td><td>00</td><td>00</td><td>03</td><td>158</td><td>00</td><td>1903</td><td>00</td><td>00</td><td>00</td><td>00</td></tr> <tr><td>25</td><td>00</td><td>00</td><td>00</td><td>00</td><td>579</td><td>1055</td><td>142</td><td>564</td><td>295</td><td>00</td><td>05</td><td>00</td></tr> <tr><td>26</td><td>00</td><td>00</td><td>00</td><td>00</td><td>310</td><td>1400</td><td>117</td><td>81</td><td>00</td><td>00</td><td>00</td><td>00</td></tr> <tr><td>27</td><td>00</td><td>00</td><td>00</td><td>53</td><td>23</td><td>257</td><td>528</td><td>284</td><td>00</td><td>00</td><td>00</td><td>00</td></tr> <tr><td>28</td><td>00</td><td>00</td><td>00</td><td>147</td><td>00</td><td>572</td><td>744</td><td>846</td><td>66</td><td>00</td><td>06</td><td>00</td></tr> <tr><td>29</td><td>00</td><td>00</td><td>00</td><td>71</td><td>18</td><td>94</td><td>340</td><td>333</td><td>312</td><td>00</td><td>00</td><td>00</td></tr> <tr><td>30</td><td>00</td><td>00</td><td>00</td><td>00</td><td>00</td><td>1402</td><td>51</td><td>64</td><td>117</td><td>00</td><td>00</td><td>00</td></tr> <tr><td>31</td><td>00</td><td>00</td><td>00</td><td>00</td><td>00</td><td>00</td><td>00</td><td>51</td><td>00</td><td>00</td><td>00</td><td>10</td></tr> <tr> <td>TOTAL</td> <td>150</td> <td>00</td> <td>1198</td> <td>630</td> <td>1929</td> <td>5758</td> <td>10258</td> <td>6118</td> <td>5655</td> <td>1368</td> <td>721</td> <td>76</td> </tr> <tr> <td>MAX</td> <td>50</td> <td>00</td> <td>431</td> <td>163</td> <td>570</td> <td>1402</td> <td>1557</td> <td>1270</td> <td>658</td> <td>343</td> <td>183</td> <td>66</td> </tr> <tr> <td>MAX2</td> <td>100</td> <td>00</td> <td>518</td> <td>313</td> <td>889</td> <td>2495</td> <td>2723</td> <td>2213</td> <td>1174</td> <td>546</td> <td>226</td> <td>66</td> </tr> <tr> <td>R.D.</td> <td>3</td> <td>0</td> <td>7</td> <td>6</td> <td>17</td> <td>20</td> <td>27</td> <td>27</td> <td>26</td> <td>17</td> <td>8</td> <td>2</td> </tr> </tbody> </table> <p style="text-align: center; margin-top: 10px;">         ANNUAL TOTAL - 34420      MAX - 1557      MAX2 - 1557      R.D. - 160     </p>			DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1	50	00	00	00	41	00	1126	00	305	15	00	00	2	50	00	00	00	05	00	312	00	46	00	53	00	3	50	00	53	00	00	208	08	00	41	05	00	00	4	00	00	157	00	18	117	438	25	193	15	00	00	5	00	00	36	00	13	10	28	93	308	297	08	66	6	00	00	112	00	00	31	523	66	272	132	137	00	7	00	00	431	00	00	00	455	61	79	203	00	00	8	00	00	00	00	00	00	08	318	36	343	00	00	9	00	00	00	00	00	00	124	88	33	97	00	00	10	00	00	340	00	00	03	290	78	97	10	00	00	11	00	00	94	00	394	86	663	18	137	15	00	00	12	00	00	00	00	10	00	1165	66	13	41	00	00	13	00	00	00	00	259	03	1557	74	597	135	183	00	14	00	00	00	00	00	51	226	84	518	330	00	00	15	00	00	00	00	43	00	69	00	658	00	00	00	16	00	00	00	00	46	00	213	208	287	00	00	00	17	00	00	00	00	20	00	391	30	132	109	00	00	18	00	00	00	183	97	109	216	155	26	15	00	00	19	00	00	00	150	00	71	198	89	325	74	00	00	20	00	00	00	00	00	00	00	64	107	130	00	00	21	00	00	00	00	20	41	140	118	572	00	36	00	22	00	00	00	00	00	15	00	117	25	00	142	00	23	00	00	00	46	00	28	312	1270	00	00	78	00	24	00	00	00	00	03	158	00	1903	00	00	00	00	25	00	00	00	00	579	1055	142	564	295	00	05	00	26	00	00	00	00	310	1400	117	81	00	00	00	00	27	00	00	00	53	23	257	528	284	00	00	00	00	28	00	00	00	147	00	572	744	846	66	00	06	00	29	00	00	00	71	18	94	340	333	312	00	00	00	30	00	00	00	00	00	1402	51	64	117	00	00	00	31	00	00	00	00	00	00	00	51	00	00	00	10	TOTAL	150	00	1198	630	1929	5758	10258	6118	5655	1368	721	76	MAX	50	00	431	163	570	1402	1557	1270	658	343	183	66	MAX2	100	00	518	313	889	2495	2723	2213	1174	546	226	66	R.D.	3	0	7	6	17	20	27	27	26	17	8	2
DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
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3) Annual Hyetograph



## Chapter 3

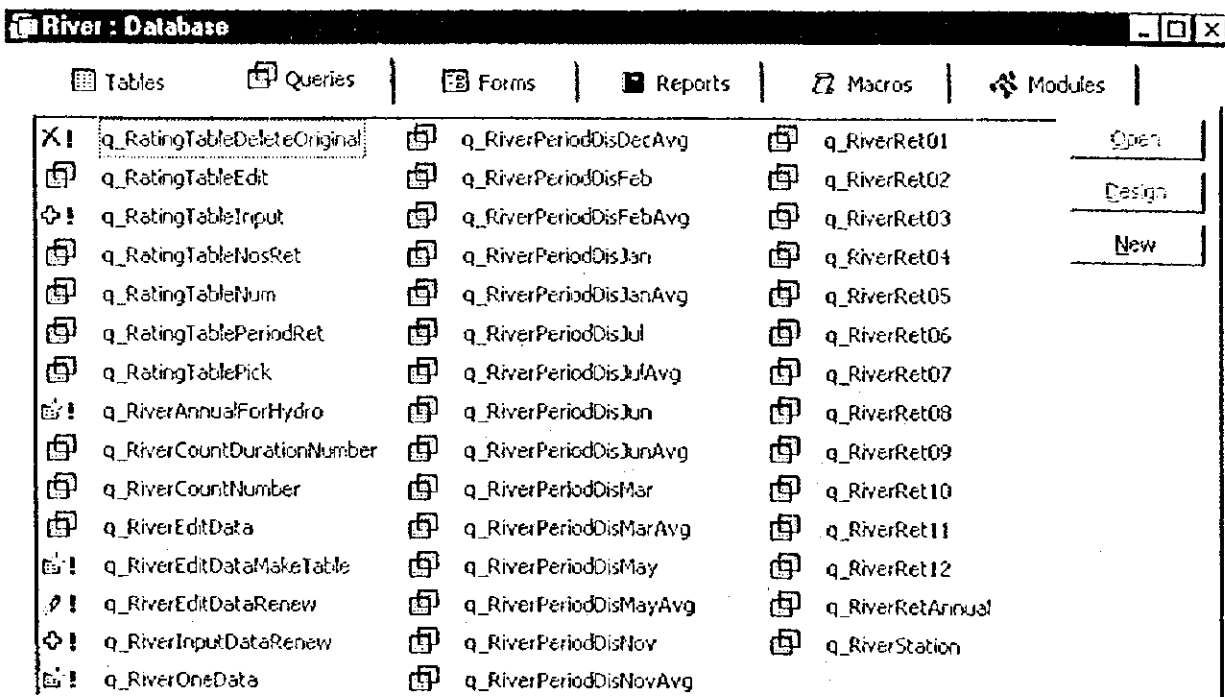
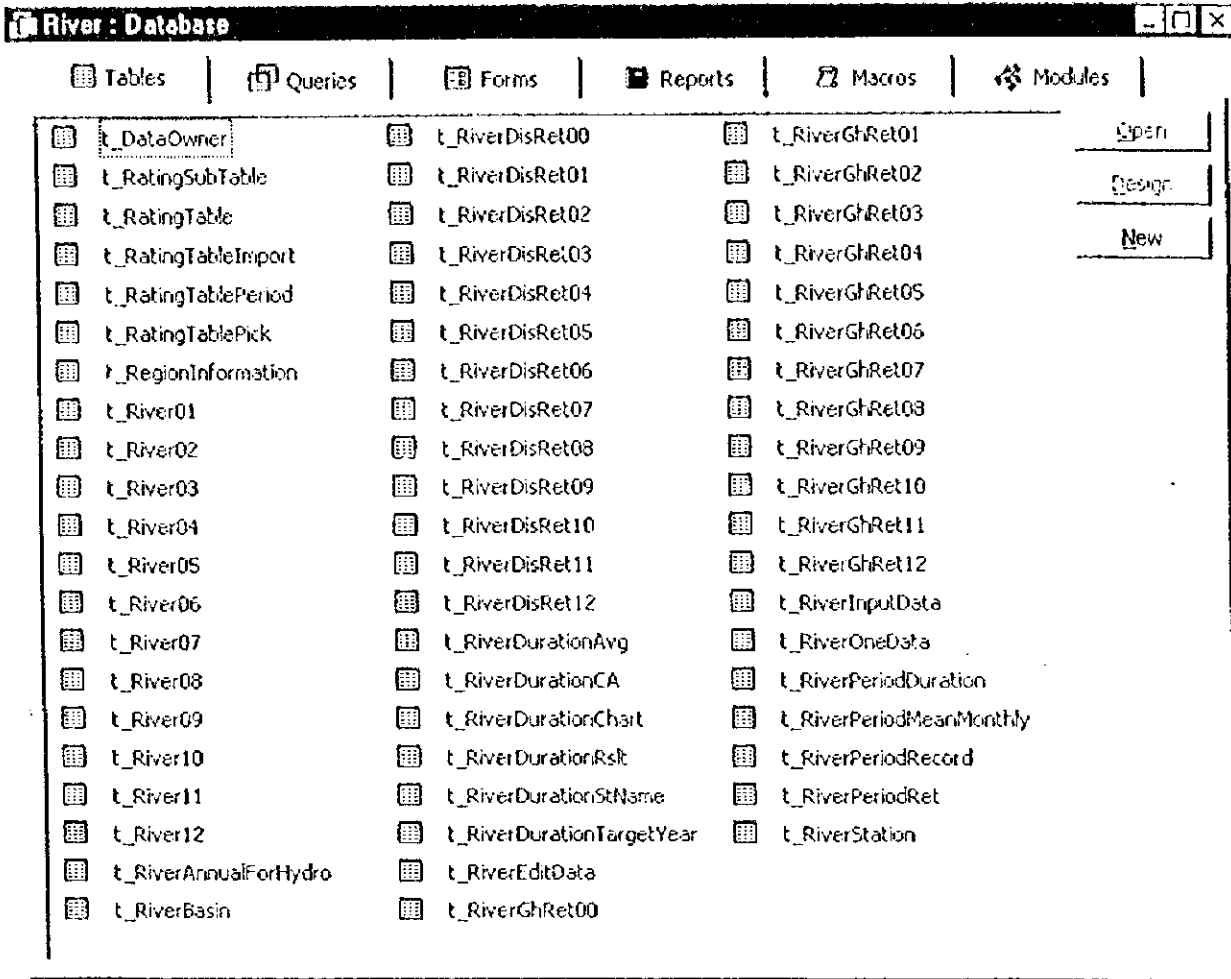
# Streamflow Database

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### 3.1 Database Components



q_RiverOneDataFromMap	q_RiverPeriodDisOct
q_RiverPeriodDisAnnualAvg	q_RiverPeriodDisOctAvg
q_RiverPeriodDisApr	q_RiverPeriodDisSep
q_RiverPeriodDisAprAvg	q_RiverPeriodDisSepAvg
q_RiverPeriodDisAug	q_RiverPeriodDuration
q_RiverPeriodDisAugAvg	q_RiverPeriodMakeTable
q_RiverPeriodDisDec	q_RiverPeriodRet

**River : Database**

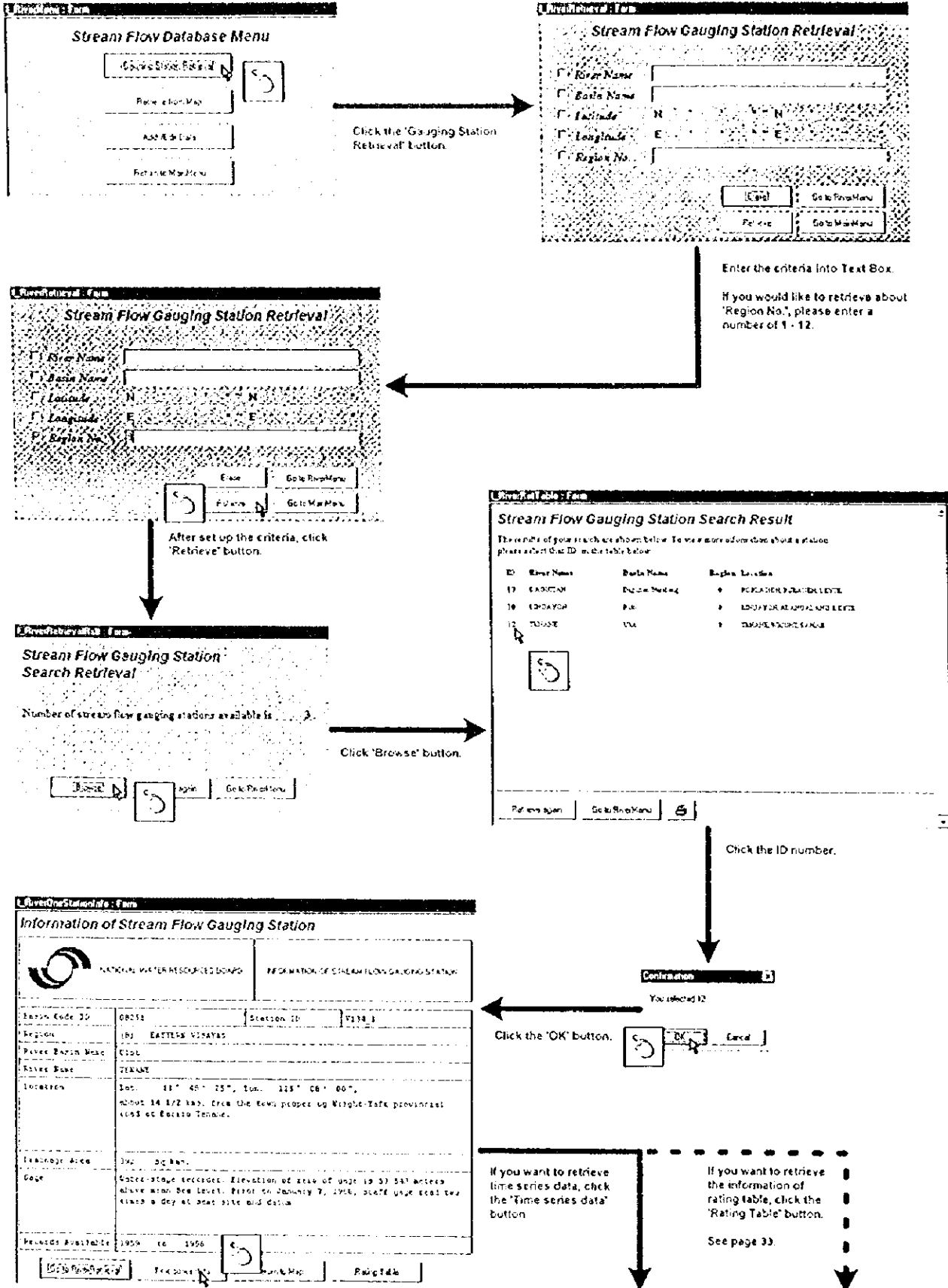
Tables | Queries | Forms | Reports | Macros | Modules

f_MapPhl	f_RiverExportFile	f_RiverPeriodRetRsltSub1	Open
f_MapRegion1	f_RiverGhRetRslt	f_RiverPeriodRetRsltSub2	Design
f_MapRegion10	f_RiverGhRetRsltSub00	f_RiverPeriodRetRsltSub3	New
f_MapRegion11	f_RiverGhRetRsltSub01	f_RiverPeriodRetRsltSub4	
f_MapRegion12	f_RiverGhRetRsltSub02	f_RiverPeriodRetRsltSub5	
f_MapRegion2	f_RiverGhRetRsltSub03	f_RiverPeriodRetRsltSub6	
f_MapRegion3	f_RiverGhRetRsltSub04	f_RiverRetrieval	
f_MapRegion4a	f_RiverGhRetRsltSub05	f_RiverRetrievalRslt	
f_MapRegion4b	f_RiverGhRetRsltSub06	f_RiverRetRslt	
f_MapRegion5	f_RiverGhRetRsltSub07	f_RiverRetRsltSub00	
f_MapRegion6	f_RiverGhRetRsltSub08	f_RiverRetRsltSub01	
f_MapRegion7	f_RiverGhRetRsltSub09	f_RiverRetRsltSub02	
f_MapRegion8	f_RiverGhRetRsltSub10	f_RiverRetRsltSub03	
f_MapRegion9	f_RiverGhRetRsltSub11	f_RiverRetRsltSub04	
f_MapSelectStation	f_RiverGhRetRsltSub12	f_RiverRetRsltSub05	
f_MapStationSample	f_RiverGhRetRsltSub13	f_RiverRetRsltSub06	
f_RatingCurveApplyPeriod	f_RiverHydroGraph	f_RiverRetRsltSub07	
f_RatingCurveGraph	f_RiverInput	f_RiverRetRsltSub08	
f_RatingTableEdit	f_RiverInputDisData	f_RiverRetRsltSub09	
f_RatingTableEditorMenu	f_RiverInputGhData	f_RiverRetRsltSub10	
f_RatingTableInfo	f_RiverInputMenu	f_RiverRetRsltSub11	
f_RatingTableInput	f_RiverMenu	f_RiverRetRsltSub12	
f_RatingTablePick	f_RiverOneStationInfo	f_RiverRetRsltSub13	
f_RiverEditDisData	f_RiverPeriodMonthRslt	f_RiverRetTable	
f_RiverEdtGhData	f_RiverPeriodRetRslt	f_RiverTimeSeriesRetrieval	

### 3.2 Streamflow Gauging Station Data (Discharge / Gauge Height / Rating Table)

#### 3.2.1 How to Retrieve

##### 1) Using Retrieval Menu



**ArvestWebSiteRetrieval Form**

### Retrieve Stream Flow Time Series Data

Please enter the year or the range of years for which you would like to retrieve data, the location which you would like the output, and whether you want the range to be in calendar years. After you have entered the data range and options, please select the flow data to retrieve (See Note).

**Stream Name:** TENNISE RIVER, TENNISE, WRIGHT, SAMAR  
**River Basin Code:** (0051) **Station ID:** V134\_1 **Period of Record:** 1953 to 1996  
**Water Resource Region:** 6

Retrieve daily data

Year:

Retrieve mean monthly data

Range of years:  to

If you need daily data, enter the year into the Text Box of 'Year'.

If you want monthly data, enter the period into the Text Box of 'Range of years'.

See Page 32

**ArvestWebSiteRetrieval Form**

### Retrieve Stream Flow Time Series Data

Please enter the year or the range of years for which you would like to retrieve data, the location which you would like the output, and whether you want the range to be in calendar years. After you have entered the data range and options, please select the flow data to retrieve (See Note).

**Stream Name:** TENNISE RIVER, TENNISE, WRIGHT, SAMAR  
**River Basin Code:** (0051) **Station ID:** V134\_1 **Period of Record:** 1953 to 1996  
**Water Resource Region:** 6

Retrieve daily data

Year:

Retrieve mean monthly data

Range of years:  to

Click 'Retrieve data' button.

**ArvestWebSiteRetrieval Form**

### Result of Stream Flow Data Retrieval

**NATIONAL WATER RESOURCES BOARD** **MEAN DAILY GAUGE HEIGHT DATA TABLE**

**STATION NAME:** TENNISE RIVER, TENNISE, WRIGHT, SAMAR

**STATION ID:** V134\_1  
**PERIOD OF RECORD:** 1953 to 1996  
**WATER RESOURCE REGION:** 6

**DATE:** 11/11/2004 11:11 AM  
**TIME:** 11:11 AM

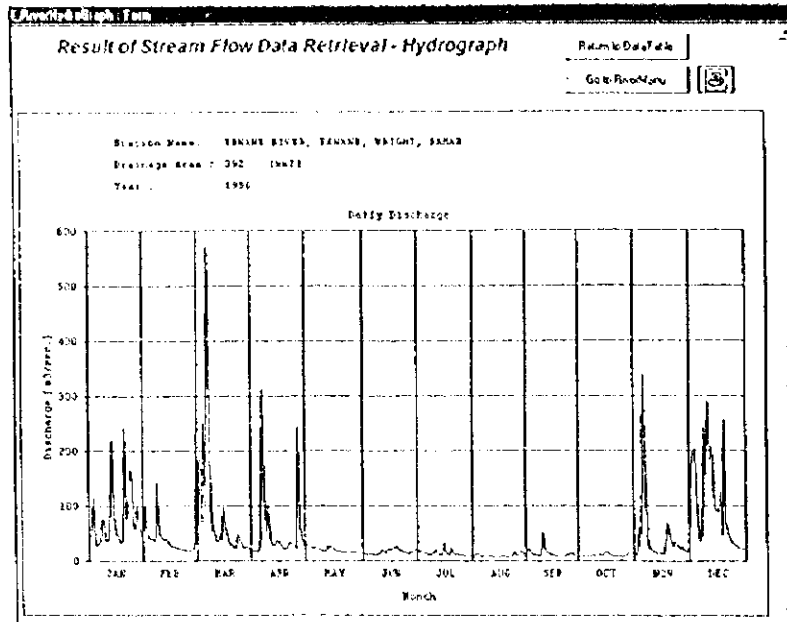
**GAUGE HEIGHT DATA TABLE**

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1953	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1954	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1955	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1956	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1957	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1958	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1959	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1960	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1961	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1962	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1963	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1964	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1965	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1966	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1967	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1968	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1969	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1970	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1971	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1972	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1973	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1974	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1975	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1976	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1977	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1978	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1979	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1980	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1981	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1982	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1983	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1984	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1985	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1986	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1987	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1988	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1989	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1990	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1991	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1992	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1993	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1994	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1995	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1996	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

If you want to see also the gauge height data, click the 'SeeAlso' button.



On the discharge form of search results, you can get annual hydrograph when you click this (DrawGraph) button.



On the forms of search results, you can export to other file format when you click this (ExportData) button.

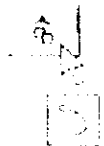
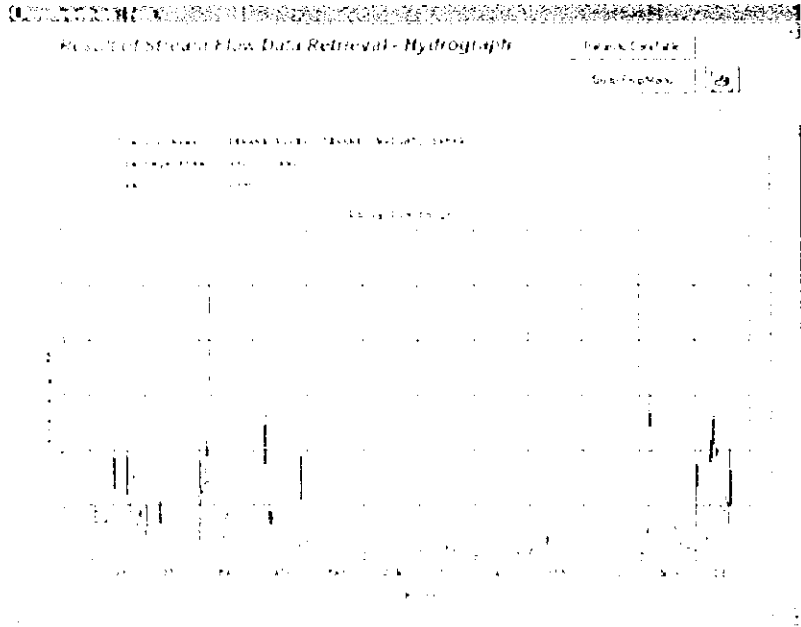
Enter the file name and folder (directory) which you want to place.

When you want to be exported by the name, TenaneRiver, in the A drive, it inputs like this example.

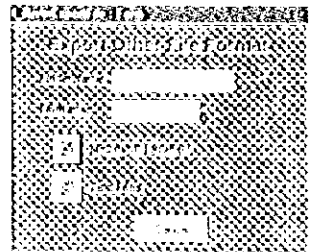
Insert the diskette into floppy drive, and then click a button of file format which you want to export.



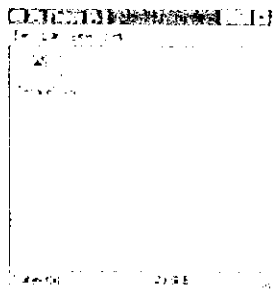
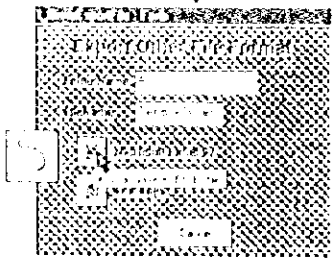
On the left side of the screen, you can click on the buttons which are shown in the following figure.



On the form of saved results, you can export to different format when you click on the export data button.



Enter the file name and folder address in which you want to place



When you want to be exported by the name, then hover on the Address, it inputs like this example

Insert the diskette into floppy drive and then click a button of the format which you want to export

From Page 30. 30 31 32 33

**RiverInfoSearchRetrieval\_Form**

### Retrieve Stream Flow Time Series Data

Please enter the name of the river for which you would like to retrieve data. Use format in which you would like the output, and whether you want the range to be a starting year. After you have entered the data range and option, please click Retrieve data to retrieve the data.

Location Name: TENEKE RIVER, TENEKE, WRIGHT, SAMAR  
 River Name Code: TDR7111, Station ID: 1111, Period of Record: 1959 to 1995

Output Parameters Options:

Retrieve data from:

Year:

Retrieve from monthly data:

Range of years:  to

Buttons: Error, Refresh Data, Go to RiverInfo

Click 'Retrieve data' button.

**RiverPeriodMonthly\_Form**

### Result of Stream Flow Data Retrieval

NATIONAL WATER RESOURCES BOARD MEAN MONTHLY DISCHARGE DATA TABLE

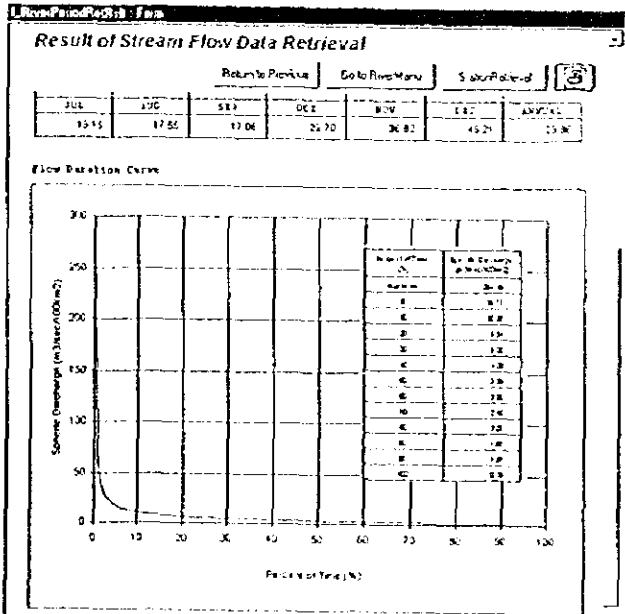
STATION NAME: TENEKE RIVER, TENEKE, WRIGHT, SAMAR  
 DISCHARGE AREA: 771 sq km  
 PERIOD OF RECORD (YEAR): 1959 to 1995

MEAN MONTHLY DISCHARGE IN CUMEC METERS PER SECOND

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1959	2.4	1.1	1.7	6.7	9.9	8.4	12.1	17.8	16.8	14.8	11.8	10.8	10.8
1960	2.8	2.3	4.7	8.8	12.8	12.8	12.1	21.8	17.8	11.8	7.8	6.8	11.8
1961	2.8	2.3	5.8	11.1	12.8	11.1	12.8	21.8	17.8	11.8	7.8	6.8	11.8
1962	2.4	1.1	1.7	7.8	12.8	12.8	12.8	21.8	17.8	11.8	7.8	6.8	11.8
1963	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
1964	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
1965	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
1966	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
1967	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
1968	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
1969	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
1970	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
1971	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
1972	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
1973	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
1974	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
1975	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
1976	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
1977	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
1978	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
1979	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
1980	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
1981	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
1982	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
1983	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
1984	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
1985	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
1986	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
1987	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
1988	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
1989	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
1990	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
1991	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
1992	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
1993	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
1994	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
1995	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8

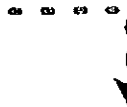
Buttons: Refresh Data, Go to RiverInfo

If you want to see the flow duration curve, click 'DrawGraph' button.







From Page 29. 


**Rating Table Records Information**

Enter a Station ID number for which you would like to look rating table information.

Station ID: V324\_1  
 Station: TENNESSEE RIVER, TENNESSEE, VAUGHN, DAM#1

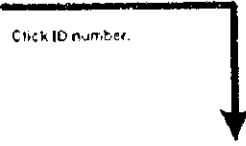
Available records of Rating Table

ID	Date Prepared	From	To
1	1997/1/20/1	1997/1/1/1	1997/1/31/1



[Return to Station ID](#)

Click ID number.



**Rating Table Information**

NATIONAL WATER RESOURCES BOARD

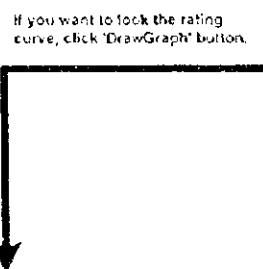
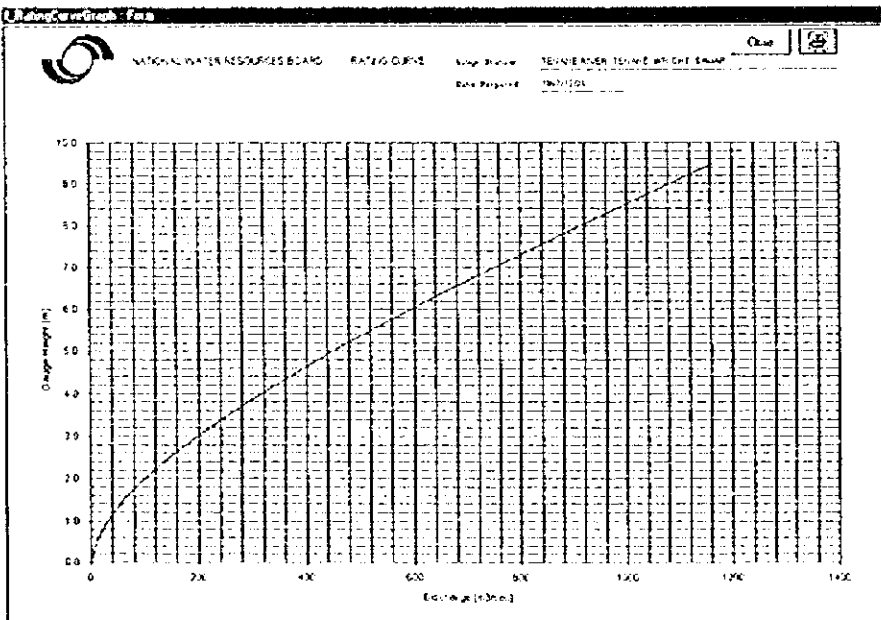
Rating Table: V324\_1  
 Date Prepared: 1997/1/20/1

Gauge Section: TENNESSEE RIVER, TENNESSEE, VAUGHN, DAM#1

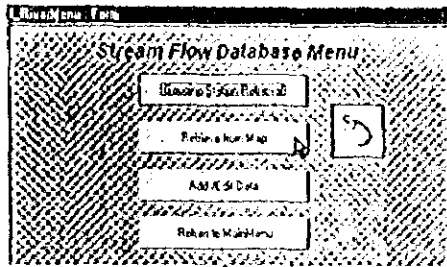
Flow (cfs)	00	01	02	03	04	05	06	07	08	09	Rating (ft)
00											
01	3.50	3.50	3.70	3.90	4.00	4.30	4.50	4.80	5.00	5.40	
02	4.50	4.50	4.70	4.90	5.00	5.30	5.50	5.80	6.00	6.40	
03	5.50	5.70	5.90	6.10	6.30	6.50	6.70	7.00	7.30	7.60	
04	7.50	7.80	8.10	8.40	8.70	9.00	9.30	9.50	9.80	10.20	
05	10.50	10.80	11.20	11.50	11.90	12.20	12.60	12.90	13.30	13.60	
06	14.00	14.40	14.80	15.20	15.60	16.00	16.40	16.80	17.20	17.60	
07	18.50	18.80	19.30	19.70	20.10	20.50	20.90	21.30	21.70	22.10	
08	23.50	23.90	24.30	24.70	25.10	25.50	25.90	26.30	26.70	27.10	
09	27.50	28.00	28.50	29.00	29.50	30.00	30.50	31.00	31.50	32.00	
10	31.00	31.50	32.00	32.50	33.00	33.50	34.00	34.50	35.00	35.50	
11	37.00	37.50	38.00	38.50	39.00	39.50	40.00	40.50	41.00	41.50	
12	47.50	48.00	48.50	49.00	49.50	50.00	50.50	51.00	51.50	52.00	
13	49.50	49.80	50.10	50.40	50.70	51.00	51.30	51.60	51.90	52.20	
14	54.50	54.80	55.10	55.40	55.70	56.00	56.30	56.60	56.90	57.20	
15	59.50	59.80	60.10	60.40	60.70	61.00	61.30	61.60	61.90	62.20	
16	64.50	64.80	65.10	65.40	65.70	66.00	66.30	66.60	66.90	67.20	

WATER YEAR: 1997 / 1 / 1 - 1997 / 12 / 31

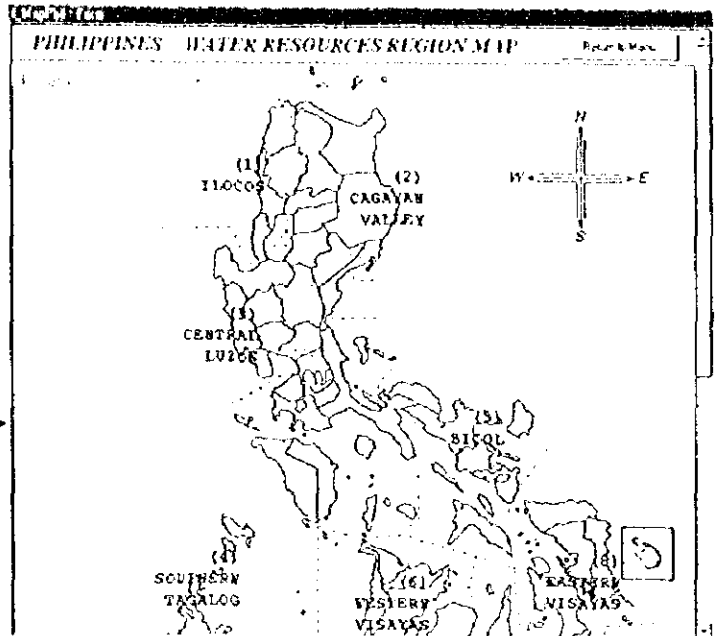
If you want to lock the rating curve, click 'DrawGraph' button.

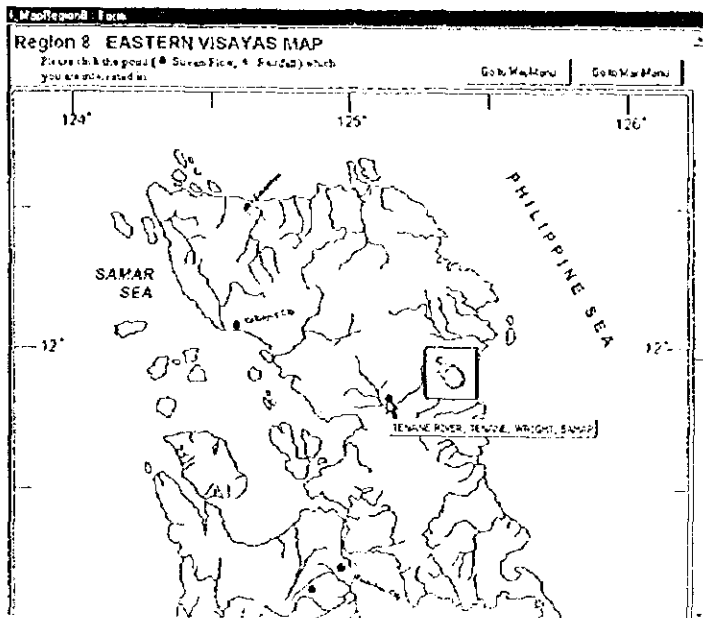
2) Using Retrieval Map



Click the 'Retrieve from Map' button.



Click a region name (blue character)



Click a stream flow gauging station button (red color).


Rainfall station button (light blue color) is not available when you are searching a station for stream flow data.

Confirmation

You selected Region 8

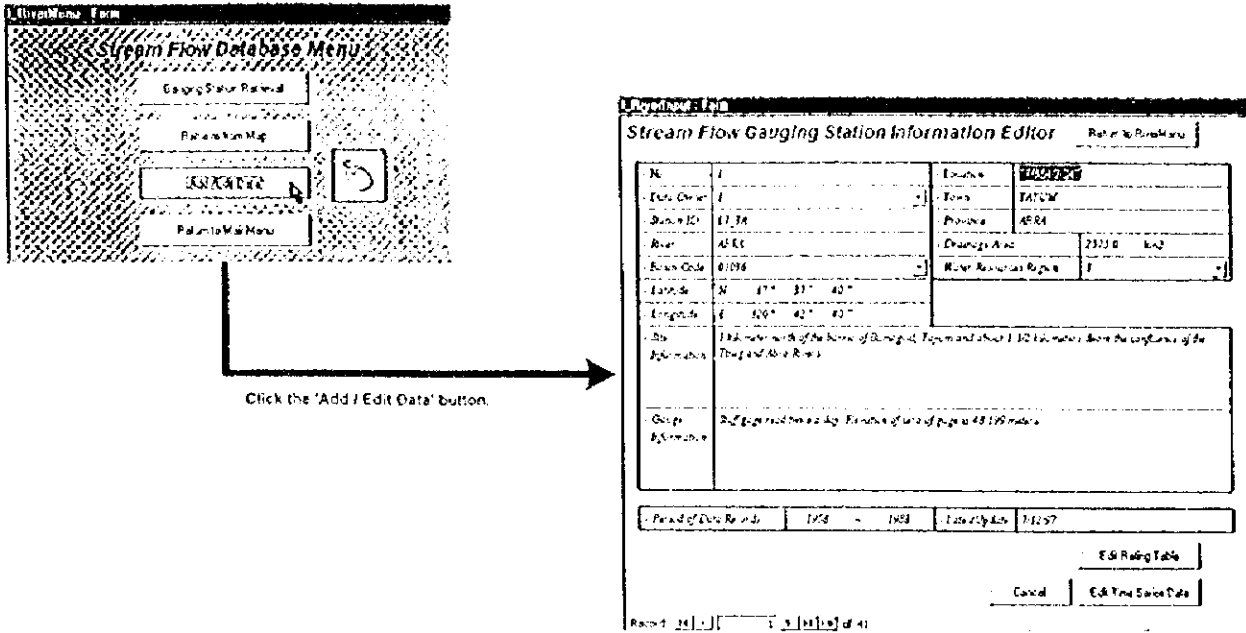
Click 'OK' button.

Information of Stream Flow Gauging Station

 NATIONAL WATER RESOURCES BOARD		INFORMATION OF STREAM FLOW GAUGING STATION	
Basin Code ID	60251	Station ID	1973_1
Region	(8) EASTERN VISAYAS		
River Basin Name	TANAYAN		
River Name	TANAYAN		
Location	Lat. 11° 40' 25", Lon 125° 00' 00" about 18 1/2 kms. from the town center of Butte-Bute provincial seat at Butte-Bute.		
Drainage Area	397 sq kms.		
Gate	Water-gate located. Elevation of gate at gate is 34 meters above mean sea level. Built on January 7, 1965. There are lead two (2) m. by 40 cm. side and gate.		
Records Available	1959 to 1970		
<input type="button" value="Go Back"/> <input type="button" value="Print"/> <input type="button" value="Refresh"/> <input type="button" value="Exit"/>			

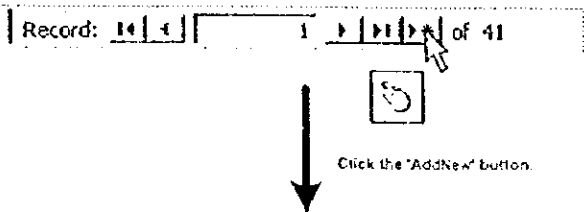
After this, you are possible to advance in the way of '1) Using Retrieval Menu'

3.2.2 How to Add / Edit

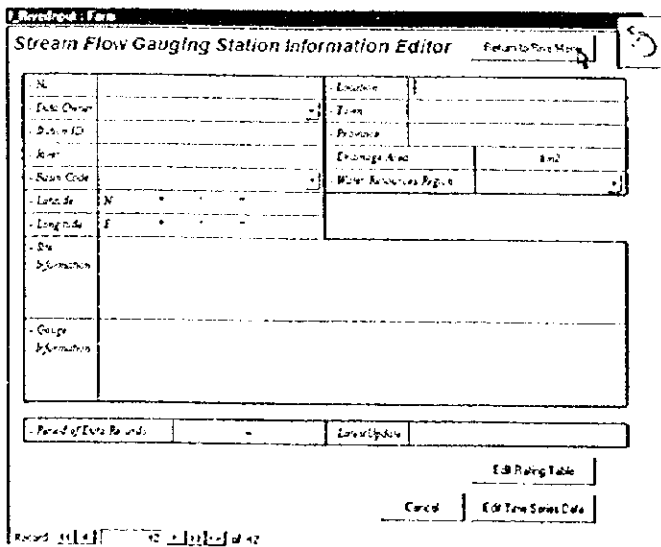


Click the 'Add / Edit Data' button.

1) Add New Information of Streamflow Gauging Station



Click the 'AddNew' button.



Enter the information of stream gauging station such as Location, Town, Province, Data Owner, StationID, River, Basin Code, Latitude, Longitude, Water Resources Region, Site Information, Gauge Information.

After that, click 'Return to RiverMenu' button.

2) Edit the Information of Streamflow Gauging Station

Record: 1 of 41

Click the 'Move' button to select the information of stream flow gauging station.

**Stream Flow Gauging Station Information Editor**

- No	1	- Location	AYYASOYUN
- Data Owner	1	- Town	TATLIK
- Station ID	17_34	- Province	ADANA
- River	ADANA	- Drainage Area	2373.0 km <sup>2</sup>
- Basin Code	01015	- Water Resources Region	1
- Latitude	N 37° 32' 43"		
- Longitude	E 30° 42' 43"		
- Site Information	1.8 km north of the bridge of Beylik Toprak and about 1.10 km from a dam on the confluence of the Tuz and Adana Rivers		
- Gauge Information	Duff gauge read three times a day at low of gauge at 43.139 meters		
- Period of Data Records	1978 - 1984	- Level of Data	2.1297

Buttons: **Edit Rating Table**, **Cancel**, **Edit Time Series Data**

Enter the information which you want to edit, and then click 'Return to River Menu' button.

3) Add New data of Rating Table

**Stream Flow Gauging Station Information Editor**

- No	12	- Location	YERPE
- Data Owner	1	- Town	YERPE
- Station ID	1114_3	- Province	ERZURUM
- River	TERANUS	- Drainage Area	122.0 km <sup>2</sup>
- Basin Code	06231	- Water Resources Region	8
- Latitude	N 41° 43' 23"		
- Longitude	E 42° 8' 0"		
- Site Information	about 20 km from the town proper of Yerpe, 1.5 km from the end of the dam		
- Gauge Information	Water stage recorder. Excesses of level of gauge at 54.502 meters above mean sea level. From January 7, 1990, duff gauge read two times a day at same site and datum.		
- Period of Data Records	1989 - 1996	- Level of Data	520.997

Buttons: **Edit Rating Table**, **Cancel**, **Edit Time Series Data**

Click the 'Edit Rating Table' button.

**Rating Table Records Information Editor**

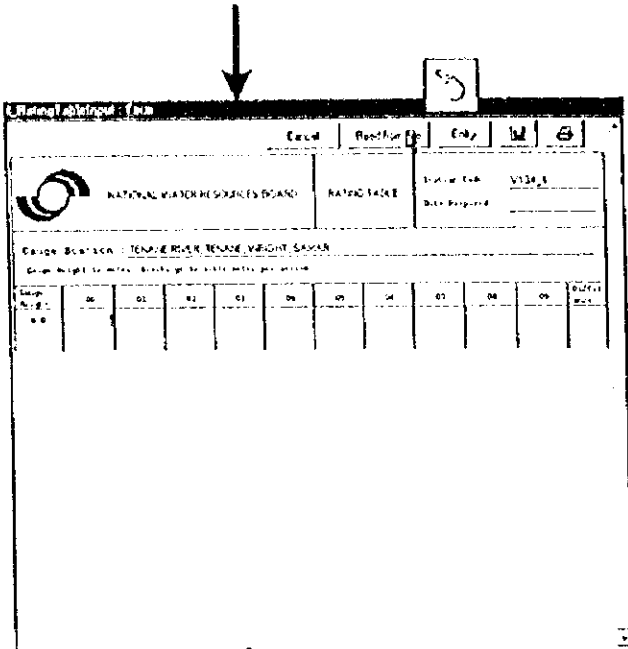
Please enter the data for which you wish to edit rating table information. If you want to input new rating table, click the 'Input new Rating Table' button.

Station ID: 1114\_3  
 Station: TERANUS SEVER, TERANUS, YERPE, TERANUS

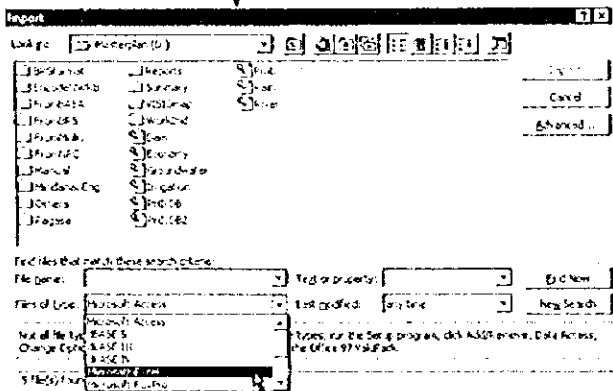
ID	Each Prepared	Approximate Period of Rating Table	
		From	To
		1	1

Buttons: **Input new Rating Table**, **Cancel**

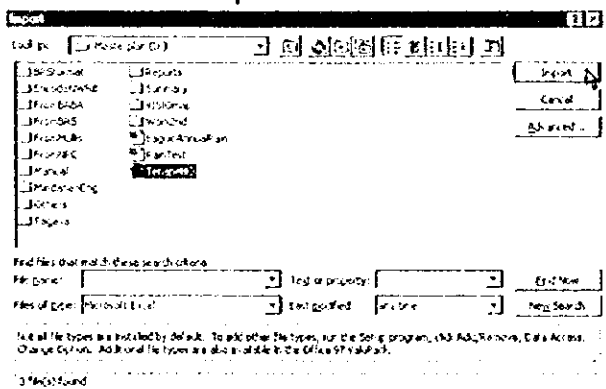
Click the 'Input new Rating Table' button.



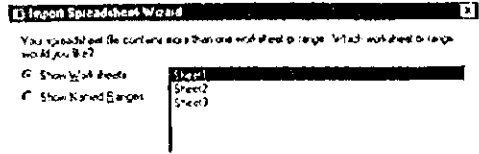
Click the 'Read from File' button if you want to read from other file format such as Microsoft Excel.



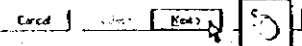
From Combo Box of 'Files of type', select the files of type which you want to open. In this case, select Microsoft Excel.



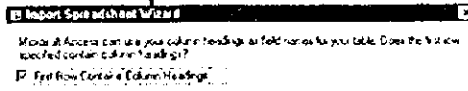
Select the file which you want to open, and then click 'Import' button.



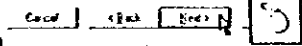
Year	00	01	02	03	04	05
1	0					
2	0					
3	1	3 500	3 600	3 700	3 800	3 900
4	2	4 500	4 600	4 700	4 800	4 900
5	3	5 500	5 600	5 700	5 800	5 900
6	4	6 500	6 600	6 700	6 800	6 900
7	5	7 500	7 600	7 700	7 800	7 900
8	6	8 500	8 600	8 700	8 800	8 900
9	7	9 500	9 600	9 700	9 800	9 900



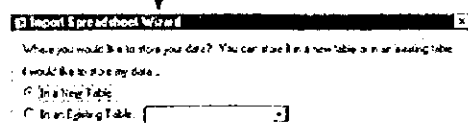
Select the Option Button of 'Show Worksheets', and then click 'Next >' button.



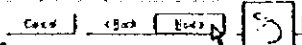
Year	00	01	02	03	04	05
1	0					
2	1	3 500	3 600	3 700	3 800	3 900
3	2	4 500	4 600	4 700	4 800	4 900
4	3	5 500	5 600	5 700	5 800	5 900
5	4	6 500	6 600	6 700	6 800	6 900
6	5	7 500	7 600	7 700	7 800	7 900
7	6	8 500	8 600	8 700	8 800	8 900
8	7	9 500	9 600	9 700	9 800	9 900



If there are column heading in the first row of sheet, you must click the Check Box of 'First Row Contains Column Headings'. And then click 'Next >' button.



Year	00	01	02	03	04	05
1	0					
2	1	3 500	3 600	3 700	3 800	3 900
3	2	4 500	4 600	4 700	4 800	4 900
4	3	5 500	5 600	5 700	5 800	5 900
5	4	6 500	6 600	6 700	6 800	6 900
6	5	7 500	7 600	7 700	7 800	7 900
7	6	8 500	8 600	8 700	8 800	8 900
8	7	9 500	9 600	9 700	9 800	9 900



Select the Option Button of 'In a New Table', and then click 'Next >' button.

**Import Spreadsheet Wizard**

You can specify information about each of the tables you are importing. Select tables in the area below. You can optionally refer to information in the Field Options area.

Field Options  
 Field Name: [00]    Database: [1987]    [OK]    [Cancel]    [Help]

Imported: [No]     Don't import field(s):

	00	01	02	03	04	05
1	0	0	0	0	0	0
2	1	3 500	4 600	4 700	4 800	4 900
3	2	4 500	4 600	4 700	4 800	4 900
4	3	5 500	5 700	5 900	6 100	6 300
5	4	6 500	7 000	7 500	8 000	8 500
6	5	7 500	8 000	8 100	8 200	8 300
7	6	8 500	9 000	9 100	9 200	9 300
8	7	9 500	10 000	10 100	10 200	10 300
9	8	10 500	11 000	11 100	11 200	11 300
10	9	11 500	12 000	12 100	12 200	12 300
11	10	12 500	13 000	13 100	13 200	13 300
12	11	13 500	14 000	14 100	14 200	14 300
13	12	14 500	15 000	15 100	15 200	15 300
14	13	15 500	16 000	16 100	16 200	16 300
15	14	16 500	17 000	17 100	17 200	17 300
16	15	17 500	18 000	18 100	18 200	18 300
17	16	18 500	19 000	19 100	19 200	19 300
18	17	19 500	20 000	20 100	20 200	20 300
19	18	20 500	21 000	21 100	21 200	21 300
20	19	21 500	22 000	22 100	22 200	22 300

Cancel    < Back    Next >    [Finish]    [Help]

Click 'Next >' button.

**Import Spreadsheet Wizard**

Microsoft Access recommends that you define a primary key for your new table. A primary key is used to quickly locate each record in your table. If tables you're importing do not have a primary key, you can choose to:

Let Access add Primary Key  
 Choose My Own Primary Key  
 No Primary Key

	00	01	02	03	04	05
1	0	0	0	0	0	0
2	1	3 500	4 600	4 700	4 800	4 900
3	2	4 500	4 600	4 700	4 800	4 900
4	3	5 500	5 700	5 900	6 100	6 300
5	4	6 500	7 000	7 500	8 000	8 500
6	5	7 500	8 000	8 100	8 200	8 300
7	6	8 500	9 000	9 100	9 200	9 300
8	7	9 500	10 000	10 100	10 200	10 300
9	8	10 500	11 000	11 100	11 200	11 300
10	9	11 500	12 000	12 100	12 200	12 300
11	10	12 500	13 000	13 100	13 200	13 300
12	11	13 500	14 000	14 100	14 200	14 300
13	12	14 500	15 000	15 100	15 200	15 300
14	13	15 500	16 000	16 100	16 200	16 300
15	14	16 500	17 000	17 100	17 200	17 300
16	15	17 500	18 000	18 100	18 200	18 300
17	16	18 500	19 000	19 100	19 200	19 300
18	17	19 500	20 000	20 100	20 200	20 300
19	18	20 500	21 000	21 100	21 200	21 300
20	19	21 500	22 000	22 100	22 200	22 300

Cancel    < Back    Next >    [Finish]    [Help]

Click Option Button of 'No Primary Key', and then click 'Next >' button.

**Import Spreadsheet Wizard**

Enter all the information in the wizard to import your data.

Import to Table:  
 RatingTableImport

I would like a wizard to analyze my table after importing the data.  
 Display Help after the wizard is finished.

Cancel    < Back    Next >    [Finish]    [Help]

Enter as 'RatingTableImport' into the Text Box of 'Import to Table', and then click 'Finish' button.

**Import Spreadsheet Wizard**

Overwrite existing table or query 'RatingTableImport'?

Yes    No

Click 'Yes' button.

**Import Spreadsheet Wizard**

Finished importing file 'D:\1997\12\10\1987\RatingTableImport'.

OK    [Help]

Click 'OK' button.

**RatingTableImport - Form**

Cancel    Refresh Fields    Erase    [M]    [B]

NATIONAL WATER RESOURCES BOARD    RATING TABLE    Print: [Y124,1]    Print Prepared: [ ]

Gauge Station: TENANE RIVER, TENANE WRIGHT, SAMAR  
 Group Weight to include: All (except to public with you access)

Group Weight	00	01	02	03	04	05	06	07	08	09	0/1000
0.0											
0.1	3 500	3 500	3 700	3 800	3 900	4 000	4 100	4 200	4 300	4 400	0.100
0.2	4 500	4 500	4 700	4 800	4 900	5 000	5 100	5 200	5 300	5 400	0.100
0.3	5 500	5 700	5 900	6 100	6 300	6 500	6 700	6 900	7 100	7 300	0.200
0.4	7 500	7 800	8 100	8 400	8 700	9 000	9 300	9 600	9 900	10 200	0.300
0.5	10 500	10 800	11 200	11 500	11 900	12 200	12 500	12 900	13 200	13 500	0.300
0.6	14 000	14 400	14 800	15 200	15 600	16 000	16 400	16 800	17 200	17 600	0.400
0.7	18 000	18 400	18 800	19 200	19 600	20 000	20 400	20 800	21 200	21 600	0.400
0.8	22 500	22 900	23 300	23 700	24 100	24 500	24 900	25 300	25 700	26 100	0.400
0.9	27 000	27 400	27 800	28 200	28 600	29 000	29 400	29 800	30 200	30 600	0.500
1.0	32 000	32 400	32 800	33 200	33 600	34 000	34 400	34 800	35 200	35 600	0.500
1.1	37 000	37 400	37 800	38 200	38 600	39 000	39 400	39 800	40 200	40 600	0.500
1.2	47 500	47 900	48 300	48 700	49 100	49 500	49 900	50 300	50 700	51 100	0.600
1.3	45 500	45 900	46 300	46 700	47 100	47 500	47 900	48 300	48 700	49 100	0.600
1.4	54 500	54 900	55 300	55 700	56 100	56 500	56 900	57 300	57 700	58 100	0.700
1.5	60 500	60 900	61 300	61 700	62 100	62 500	62 900	63 300	63 700	64 100	0.700

After read or encoded data, enter the date as following format into Text Box of 'Date Prepared'. [e.g] 1997/12/30

Rating Table Editor Form

NATIONAL WATER RESOURCES BOARD RATING TABLE

Station Code: V134.1  
Date Prepared: 12/21/2001

Gauge Station: TENNISE RIVER, TENNISE, WRIGHT, SARAS

Rating Table Information: Rating table is active. It is being used to calculate the flow.

Stage	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	Rating
0.0																	
0.1	3.50	3.50	3.70	3.90	3.90	4.00	4.20	4.30	4.30	4.40	4.40	4.40	4.40	4.40	4.40	0.10	
0.2	4.50	4.60	4.70	4.80	4.90	5.00	5.10	5.10	5.20	5.30	5.40	5.40	5.40	5.40	5.40	0.10	
0.3	5.50	5.70	5.90	6.10	6.20	6.50	6.70	6.90	7.10	7.30	7.50	7.70	7.90	8.10	8.30	0.20	
0.4	7.50	7.80	8.10	8.40	8.70	9.00	9.30	9.60	9.90	10.20	10.50	10.80	11.10	11.40	11.70	0.30	
0.5	12.50	12.80	13.10	13.40	13.70	14.00	14.30	14.60	14.90	15.20	15.50	15.80	16.10	16.40	16.70	0.40	
0.6	14.00	14.40	14.80	15.20	15.60	16.00	16.40	16.80	17.20	17.60	18.00	18.40	18.80	19.20	19.60	0.40	
0.7	18.00	18.40	18.80	19.20	19.60	20.00	20.40	20.80	21.20	21.60	22.00	22.40	22.80	23.20	23.60	0.40	
0.8	22.50	22.90	23.30	23.70	24.10	24.50	24.90	25.30	25.70	26.10	26.50	26.90	27.30	27.70	28.10	0.40	
0.9	27.00	27.50	28.00	28.50	29.00	29.50	30.00	30.50	31.00	31.50	32.00	32.50	33.00	33.50	34.00	0.50	
1.0	32.00	32.50	33.00	33.50	34.00	34.50	35.00	35.50	36.00	36.50	37.00	37.50	38.00	38.50	39.00	0.50	
1.1	37.00	37.50	38.00	38.50	39.00	39.50	40.00	40.50	41.00	41.50	42.00	42.50	43.00	43.50	44.00	0.50	
1.2	47.50	48.00	48.50	49.00	49.50	50.00	50.50	51.00	51.50	52.00	52.50	53.00	53.50	54.00	54.50	0.50	
1.3	43.50	44.00	44.50	45.00	45.50	46.00	46.50	47.00	47.50	48.00	48.50	49.00	49.50	50.00	50.50	0.50	
1.4	54.50	55.00	55.50	56.00	56.50	57.00	57.50	58.00	58.50	59.00	59.50	60.00	60.50	61.00	61.50	0.50	
1.5	62.50	63.00	63.50	64.00	64.50	65.00	65.50	66.00	66.50	67.00	67.50	68.00	68.50	69.00	69.50	0.70	

When you entered the date, the window for which input the applied period of rating table will appear.

Rating Curve Application Form

Period of Rating Table Application

Year Month Day

From: 1997 1 1

To: 1997 12 31

OK

Enter the applied period of rating table in the Text Boxes.

Rating Curve Application Form

Period of Rating Table Application

Year Month Day

From: 1997 1 1

To: 1997 12 31

OK

Click 'OK' button.

Confirmation

Do you want to enter new data?

OK

Click 'Entry' button.

Click 'OK' button.

Rating Table Editor Form

NATIONAL WATER RESOURCES BOARD RATING TABLE

Station Code: V134.1  
Date Prepared: 12/21/2001

Gauge Station: TENNISE RIVER, TENNISE, WRIGHT, SARAS

Rating Table Information: Rating table is active. It is being used to calculate the flow.

Stage	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	Rating
0.0																	
0.1	3.50	3.50	3.70	3.90	3.90	4.00	4.20	4.30	4.30	4.40	4.40	4.40	4.40	4.40	4.40	0.10	
0.2	4.50	4.60	4.70	4.80	4.90	5.00	5.10	5.10	5.20	5.30	5.40	5.40	5.40	5.40	5.40	0.10	
0.3	5.50	5.70	5.90	6.10	6.20	6.50	6.70	6.90	7.10	7.30	7.50	7.70	7.90	8.10	8.30	0.20	
0.4	7.50	7.80	8.10	8.40	8.70	9.00	9.30	9.60	9.90	10.20	10.50	10.80	11.10	11.40	11.70	0.30	
0.5	12.50	12.80	13.10	13.40	13.70	14.00	14.30	14.60	14.90	15.20	15.50	15.80	16.10	16.40	16.70	0.40	
0.6	14.00	14.40	14.80	15.20	15.60	16.00	16.40	16.80	17.20	17.60	18.00	18.40	18.80	19.20	19.60	0.40	
0.7	18.00	18.40	18.80	19.20	19.60	20.00	20.40	20.80	21.20	21.60	22.00	22.40	22.80	23.20	23.60	0.40	
0.8	22.50	22.90	23.30	23.70	24.10	24.50	24.90	25.30	25.70	26.10	26.50	26.90	27.30	27.70	28.10	0.40	
0.9	27.00	27.50	28.00	28.50	29.00	29.50	30.00	30.50	31.00	31.50	32.00	32.50	33.00	33.50	34.00	0.50	
1.0	32.00	32.50	33.00	33.50	34.00	34.50	35.00	35.50	36.00	36.50	37.00	37.50	38.00	38.50	39.00	0.50	
1.1	37.00	37.50	38.00	38.50	39.00	39.50	40.00	40.50	41.00	41.50	42.00	42.50	43.00	43.50	44.00	0.50	
1.2	47.50	48.00	48.50	49.00	49.50	50.00	50.50	51.00	51.50	52.00	52.50	53.00	53.50	54.00	54.50	0.50	
1.3	43.50	44.00	44.50	45.00	45.50	46.00	46.50	47.00	47.50	48.00	48.50	49.00	49.50	50.00	50.50	0.50	
1.4	54.50	55.00	55.50	56.00	56.50	57.00	57.50	58.00	58.50	59.00	59.50	60.00	60.50	61.00	61.50	0.50	
1.5	62.50	63.00	63.50	64.00	64.50	65.00	65.50	66.00	66.50	67.00	67.50	68.00	68.50	69.00	69.50	0.70	

Rating Table Records Information Editor

Please enter ID number for which you would like to bring rating table information. If you want to update rating table, click the 'Input new Rating Table' button.

Station ID: V134.1  
Station: TENNISE RIVER, TENNISE, WRIGHT, SARAS

ID	Date Prepared	Available Period of Rating Table
		From To
1	12/21/2001	1997 / 1 / 1 1997 / 12 / 31

Input new Rating Table Cancel



If you want to encode directly in the sheet, you can make quickly by using following technique.

RatingTableInput - Form

Cancel | Refresh | Enter | [Print] | [Save]

NATIONAL WATER RESOURCES BOARD RATING TABLE Station Code: V134.1 Date Required:

Gauge Station: TENANE RIVER, TENANE VADSHI, SAMAR  
 Gauge height in meters, discharge in cubic meters per second

Gauge height	00	01	02	03	04	05	06	07	08	09	Discharge
0.0	3.500										0.0

Enter the initial value into Text Box of '0.0', and then enter the difference value.

Confirmation

Do you want to fill the table automatically?

Click 'OK' button.

RatingTableInput - Form

Cancel | Refresh | Enter | [Print] | [Save]

NATIONAL WATER RESOURCES BOARD RATING TABLE Station Code: V134.1 Date Required:

Gauge Station: TENANE RIVER, TENANE VADSHI, SAMAR  
 Gauge height in meters, discharge in cubic meters per second

Gauge height	00	01	02	03	04	05	06	07	08	09	Discharge
0.0	3.500	2.600	3.700	3.800	2.500	4.000	4.100	4.200	4.300	4.400	0.100
0.1	4.500										



4) Edit the data of Rating Table

**Stream Flow Gauging Station Information Editor**

ID	W134_1	Station	TENABE
Date	1997/12/31	Town	WAGOH
Area	TENABE	Province	SAMAR
Scale Code	SR051	Drainage Area	734.0 km <sup>2</sup>
Latitude	N 11° 48' 22"	Water Resources Region	3
Longitude	E 125° 8' 0"		
Site Information	about 1600 m from the bridge of the right bank of the river Tenabe River		
Group Information	Water department for Division of water supply (3) 50 meters above main Sea level. From 1 January 1, 1997, the gauge read two times a day at same interval.		

Period of Data Records: 1979 - 1996      Resolution: 10/000

Buttons: **Edit Rating Table**, **Edit Time Series Data**, **Cancel**

Click the 'Edit Rating Table' button.

**Rating Table Records Information Editor**

Please select ID number for which you would like to edit rating table information. If you want to input new rating table, click the Input new Rating Table button.

STATIONID: W134\_1  
 STATION: TENABE RIVER, TENABE, WAGOH, SAMAR

ID	Date Registered	Available Period of Rating Table
		From      To
1	1979/12/01	1979/1/1 - 1997/12/31

Buttons: **Input new Rating Table**, **Cancel**

Click the 'ID' number.

**Rating Table Editor**

NATIONAL WATER RESOURCES BOARD      RATING TABLE      STA.: W134\_1      DATE: 1997/12/31

Group Station: TENABE RIVER, TENABE, WAGOH, SAMAR  
 Group Height in meter: 1600 (in 100 m unit)

Flow No.	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Rating	
0.1																						
0.2	3.500	3.600	3.700	3.800	3.900	4.000	4.100	4.200	4.300	4.400												
0.3	4.500	4.600	4.700	4.800	4.900	5.000	5.100	5.200	5.300	5.400												
0.4	5.500	5.700	5.900	6.100	6.300	6.500	6.700	6.900	7.100	7.300												
0.5	7.500	7.800	8.100	8.400	8.700	9.000	9.300	9.600	9.900	10.200												
0.6	10.500	10.850	11.200	11.550	11.900	12.250	12.600	12.950	13.300	13.650												
0.7	14.000	14.400	14.800	15.200	15.600	16.000	16.400	16.800	17.200	17.600												
0.8	18.000	18.450	18.900	19.350	19.800	20.250	20.700	21.150	21.600	22.050												
0.9	22.500	22.950	23.400	23.850	24.300	24.750	25.200	25.650	26.100	26.550												
1.0	27.000	27.500	28.000	28.500	29.000	29.500	30.000	30.500	31.000	31.500												
1.1	32.000	32.500	33.000	33.500	34.000	34.500	35.000	35.500	36.000	36.500												
1.2	37.000	37.550	38.100	38.650	39.200	39.750	40.300	40.850	41.400	41.950												
1.3	42.000	42.600	43.200	43.800	44.400	45.000	45.600	46.200	46.800	47.400												
1.4	47.500	48.100	48.700	49.300	49.900	50.500	51.100	51.700	52.300	52.900												
1.5	54.000	54.600	55.200	55.800	56.400	57.000	57.600	58.200	58.800	59.400												
1.6	60.500	61.200	61.900	62.600	63.300	64.000	64.700	65.400	66.100	66.800												

Buttons: **Cancel**, **Entry**, **Print**, **Help**

Edit the data or information which you want to change. After edited, click 'Entry' button.

**Confirmation**

Do you want to entry edited data?

Buttons: **OK**, **Cancel**

Click the 'OK' button.

For example, on the applied period, change to 1998/12/31 from 1997/12/31.

Flow No.	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Rating	
0.2	41.500	42.100	42.700	43.300	43.900	44.500	45.100	45.700	46.300	46.900												
0.3	46.500	47.100	47.700	48.300	48.900	49.500	50.100	50.700	51.300	51.900												
0.4	52.000	52.600	53.200	53.800	54.400	55.000	55.600	56.200	56.800	57.400												

APPLIED PERIOD: 1998/1/1 - 1998/12/31

**Rating Table Records Information Editor**

Please select ID number for which you would like to edit rating table information. If you want to input new rating table, click the Input new Rating Table button.

STATIONID: W134\_1  
 STATION: TENABE RIVER, TENABE, WAGOH, SAMAR

ID	Date Registered	Available Period of Rating Table
		From      To
1	1979/12/01	1998/1/1 - 1998/12/31

Buttons: **Input new Rating Table**, **Cancel**

5) Add New Mean Daily Discharge / Gauge Height Data

**Stream Flow Gauging Station Information Editor**

Station ID: 07_3A	Agency: TATUM
Agency: AFKA	Project: AFKA
Station Code: 01016	Drainage Area: 2570 4x7
Water Resource Region: 1	

Coordinates: N 10° 31' 42" E 104° 42' 40" W

Flow: 140 meters north of the bank of River at Town and about 100 meters down the right bank of the Tongue and Alou Rivers.

Group: 80 (grouped record by location of type of gauge or structure)

Period of Data Record: 1958 - 1989

Buttons: Edit Program, Cancel, Edit the Series Data

On the stream flow gauging station which you want to add data, click the 'Edit Time Series Data' button.

**Stream Flow Time Series Data Editor**

Station ID: 07\_3A

Water Resource Region: 1

Period of Data Records: 1958 - 1989

Buttons: Input new data, Edit existing data, Return Station Editor, Go

Click the Option Button of 'Input new data'.

**Stream Flow Time Series Data Editor**

Station ID: 07\_3A

Water Resource Region: 1

Period of Data Records: 1958 - 1989

Input new data: Year: 1958

Buttons: Return Station Editor, Go

Enter the year into Text Box of 'Year'.

However you can enter the immediately previous or next year of data records. For example, if period of data records is 1958-1988, '1957' and '1989' are available.

And then click 'Go' button.

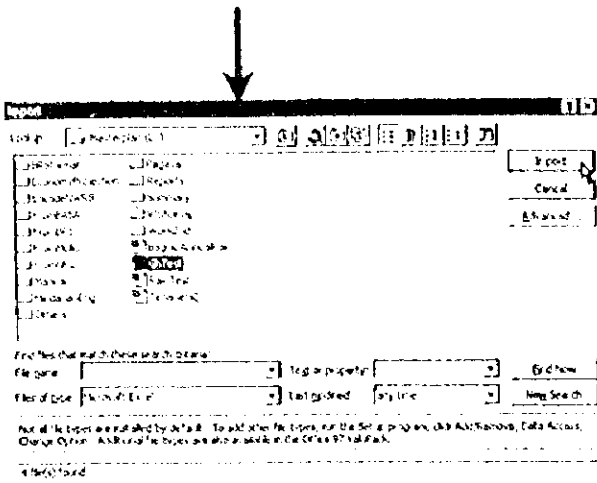
**Stream Flow Gauge Height Data Editor**

Station ID: 07\_3A Year: 1958

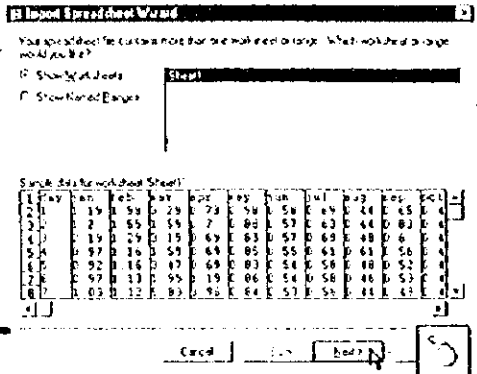
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
2	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
3	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
4	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
5	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
6	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
7	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
8	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
9	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
10	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
11	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
12	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
13	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
14	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
15	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
16	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
17	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
18	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
19	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
20	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
21	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
22	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
23	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
24	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
25	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
26	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
27	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
28	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
29	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
30	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
31	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1

Enter the mean daily gauge height data. When you encoded, the data will become red color. Click 'Discharge Editor' button if you want to encode the mean daily discharge data.

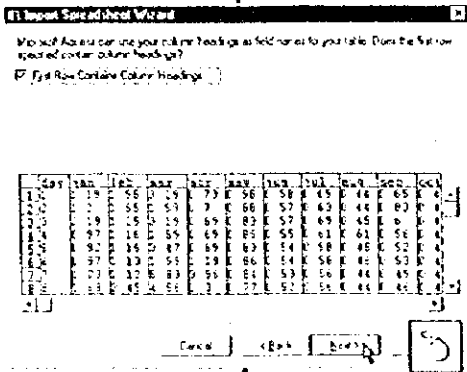
If you would like to read data from other file, click the 'Read from File' button.



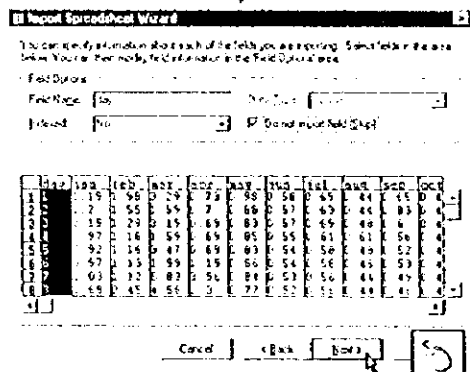
Select the file which you want to open, and then click 'Import' button.



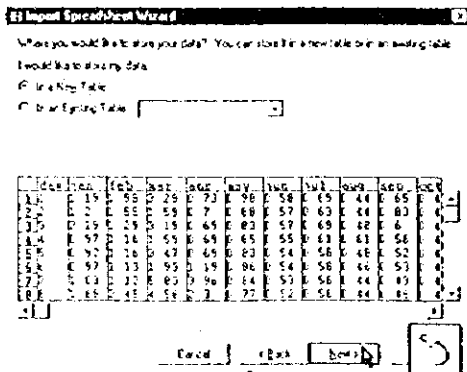
Select the Option Button of 'Show Worksheets', and then click 'Next >' button.



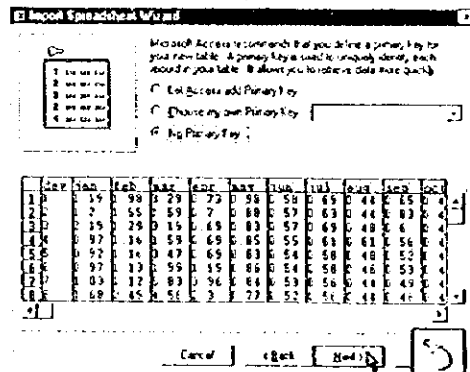
If there are name of month in the first row of sheet, you have to click the Check Box of 'First Row Contains Column Headings'. And then click 'Next >' button.



If there are number of day in the sheet, you have to click the Check Box of 'Do not import field (Skip)'. And then click 'Next >' button.



Select the Option Button of 'In a New Table', and then click 'Next >' button.



Click Option Button of 'No Primary Key', and then click 'Next >' button.

↓

**Import Spreadsheet Wizard**

This wizard will help you import data from a spreadsheet.

Import data from: RiverGHI.mdb

Import data into a new table in the current database.

Replace existing data in the selected table.

Append a copy of the data to the existing data.

Cancel OK Finish

Enter as 't\_RiverGHIimport' into the Text Box of 'Import to Table', and then click 'Finish' button.

In case of discharge data, you must enter as 't\_RiverDisimport'.

**Import Spreadsheet Wizard**

Import data from: RiverGHI.mdb

Click 'OK' button.

**Stream Flow Gauge Height Data Editor**

Station ID : 17\_3A Year : 1989

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

**Stream Flow Discharge Data Editor**

Station ID : 17\_3A Year : 1989

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	41.95	99.8	230.625	19.35	24	13.3	17.6	6.7	16	8.4	15.2	
2	47.5	44.25	67.25	18	24.1	12.95	15.2	8.7	23.6	8.1	11.5	
3	116.075	47.9	219.225	17.5	22.85	22.55	17.6	5.8	14	9.7	11.55	158.15
4	39.5	49.3	67.25	17.8	24.25	17.25	14.4	10.8	8.7	69.5	222.55	
5	28	40.3	230.675	17.6	23.65	11.9	13.3	9.9	11.7	9.6	45.7	92
6	30.5	38.1	99.65	44.3	25.2	11.9	13.3	5.1	11.55	6.1	139.15	49.7
7	33.5	38.1	569.49	310.55	24.3	11.55	12.6	8.7	16.7	0.7	231.5	75.5
8	24.4	141.25	388.55	127.35	23.35	22.7	32.6	8.7	9.3	0.7	47.9	18.1
9	74.4	22.6	101.35	54.5	18.9	11.55	12.6	6.1	10.2	9.5	30.5	243.675
10	37.55	45.5	55.7	101.35	18	11.9	14	6.1	52.7	9.3	23.4	154.55
11	35.65	41.4	53.3	44.9	16	21.05	21.15	6.1	23.15	10.5	19.8	289.25
12	38.65	38.3	34.5	32	17.2	17.1	13.3	6.1	17.6	8.7	14.4	181.27
13	58.8	40.3	36	28.5	24.1	14.8	11.55	7.8	13.3	11.55	14.8	211.5
14	218.25	38	47.3	30.5	27	26.1	11.95	7.5	11.55	9	14	176.72
15	87.1	25.5	37.55	37	22.95	21.6	10.65	6.1	11.55	12.95	14.0	57.55
16	47.5	22	55.4	34.5	20.1	19.35	22.3	7.5	10.2	15.2	13.3	53.55
17	47.3	25.65	69.5	28	20.15	21.15	16.4	7.5	9.3	15.2	12.95	69.6
18	37	24.3	56.7	25.65	16	22.55	11.9	6.1	9.3	12.95	24.55	127.15
19	33.5	27.4	33	23.5	16.6	27	12.25	6.1	5.3	11.55	65	47.5
20	35	22.65	28.5	21.6	16.4	21.5	24.75	7.8	6	9.3	52.7	256.65
21	241.875	21.6	26.1	22.65	16.9	15.75	24.4	7.5	6.1	8.4	34.3	72
22	74	21.6	24.75	34	16	18	12.4	8.4	6.1	8.1	26.3	52.1
23	91.55	20.1	24.75	31.5	16	35.2	12.8	8.7	8.4	8.1	36.5	43.1
24	165.45	20.1	49.1	25.5	15.6	35.2	13.55	8.1	9.5	8.7	37	35
25	148.55	19.8	49.1	25.2	15.2	14	10.5	18	11.55	7.8	25.65	31.5
26	68	19.8	29.5	22.65	15.6	12.95	9.9	10.2	14.6	5	20.75	28
27	55.9	19.35	25.2	24.3	16.3	16	5.9	9.3	15.4	9.1	25.65	24.1
28	103.05	21.15	23.4	41.15	15.2	14.1	5.6	10	10.85	12.25	16.9	23.4
29	53.8	35	25.65	42.65	14.9	16.6	9.3	10	9.5	11.8	17.6	22.5
30	51.3	22.95	33.5	14	20.15	9.3	16.4	9.1	14	16.6	22.65	
31	43.85	21.15					9.9	10.5		14.8		20.1

After read or encoded data, if you want to be generated discharge data by using rating table, click the 'Calculator' button.

Click 'Entry New Data' button.

**Stream Flow Gauging Station Information Editor**

Station ID: 17\_3A

Name	17_3A	Location	SUMMIT
Date Owned	1	Town	TATUM
Station ID	17_3A	Province	ARIZ
River	ADSK	Drainage Area	23200 sq-ft
Base Code	01016	Water Resources Report	1
Latitude	N 17° 32' 40"		
Longitude	E 100° 42' 43"		
Site Information	3 kilometers north of the border of Sonora, Mexico and about 1.12 kilometers from the confluence of the Tatum and Adsk Rivers		
Gauge Information	Self-generated twice a day. Elevation of top of gauge is 43199 meters		

Period of Data Records: 1938 - 1989

Buttons: Edit Rating Table, Cancel, Edit Time Series Data

In the information of 'Period of Data Records', the year was changed from 1958-1988 to 1958-1989.

6) Edit Mean Daily Discharge / Gauge Height Data

**Stream Flow Gauging Station Information Editor**

Station ID	17_1A	Water Resources Region	1
Location	TATUM	County	ARIZ
Latitude	N 117° 33' 43"	Longitude	W 109° 42' 43"

Click the 'Edit Time Series Data' button.

**Stream Flow Time Series Data Editor**

Station ID: 17\_1A  
 Water Resources Region: 1  
 Period of Data Records: 1950 - 1958  
 Edit new data  
 Edit existing data  
 Target Year: 1950

Click the Option Button of 'Edit existing data'.

**Stream Flow Time Series Data Editor**

Station ID: 17\_1A  
 Water Resources Region: 1  
 Period of Data Records: 1950 - 1958  
 Edit new data  
 Edit existing data  
 Target Year: 1950

Click 'Go' button.

**Stream Flow Time Series Data Editor**

Station ID: 17\_1A  
 Water Resources Region: 1  
 Period of Data Records: 1950 - 1958  
 Edit new data  
 Edit existing data  
 Target Year: 1950

Click the right edge of Combo Box of 'Target Year', point to a year which you want to edit, and then click it.

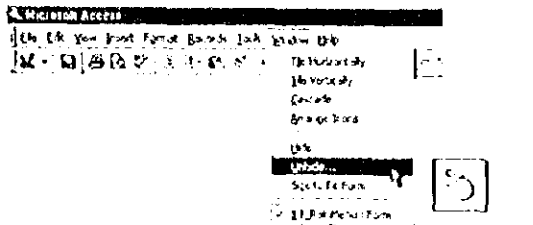
**Stream Flow Discharge Data Editor**

Station ID: 17\_1A Year: 1950

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	59.5	22.6	22.86	22.4	29.32	160.6	43.92	144.28	306.6	142.92	92.1	36.4
2	49.5	32.6	42.6	32.6	27.66	152.74	41.2	165.64	252.54	172.68	66.42	36.4
3	47.21	31.78	39.6	26.03	24.4	92.14	58.58	329.43	275.92	145	85.14	17.4
4	46.14	31.56	38.6	23.24	23.22	66.62	58.49	277.78	257.16	145.42	81.86	14.4
5	45.19	30.56	49.5	22.42	21.79	110.5	61.92	162.44	244.14	135.18	79.75	15.4
6	47.31	29.32	37.6	23.76	35.6	60.32	68	201.8	324.44	124.62	75.7	14.6
7	47.32	27.18	31.78	23.76	49.32	72.62	67.54	289.14	272.56	116.24	24.24	19.6
8	46.18	27.18	30.14	30.96	30.14	55.58	68	329.68	245.2	116.32	71.06	12.6
9	43.75	29.32	28.5	36.4	29.32	122.34	85.14	292.32	216.2	109.54	61.54	12.6
10	43.78	20.5	14.04	44.54	72.42	68.42	72.62	374.44	190.6	114.38	69.54	12.6
11	43.78	28.66	24.4	155.44	81.88	72.62	79.14	414.04	190.6	113.5	66.64	12.6
12	41.6	28.04	27.08	42.54	32.3	65.18	60.32	425.92	224.72	457.68	85.28	12.6
13	41.6	25.22	27.08	49.74	75.7	64.68	85.14	855.02	199	1603.24	74.14	11.78
14	41.5	25.22	23.74	37.6	62.36	118.74	84.88	1704.52	137.8	744.2	74.14	10.66
15	39.6	24.4	21.3	37.6	43.92	155.44	85.14	1258.34	137.8	445.52	71.06	30.66
16	38.6	21.6	21.3	42.5	50.88	130.5	97.32	686.32	160.34	356.4	61.44	30.14
17	37.6	30.64	20.44	38.6	42.6	157.58	124.46	1015.24	157.54	263.52	82.56	19.22
18	36.6	28.5	20.44	58.48	77.24	177.6	114.32	799.34	255.22	241.60	56.48	26.32
19	36.6	26.86	19.78	47.32	72.62	165	114.32	744.08	245.2	224.72	55.76	15.32
20	35.6	28.5	19.78	47.32	106.42	143.54	92.06	744.12	293.52	154.2	53.22	26.5
21	33.6	27.68	19.12	37.6	124.42	157.58	85.14	1279.38	424.28	175.24	50.86	28.5
22	31.78	27.68	19.12	36.66	104.68	133.64	72.24	2157.08	454	145.32	49.68	27.68
23	32.6	28.04	19.12	31.76	102.74	112.54	16.44	2182.22	376.48	148.42	17.32	17.68
24	29.6	24.4	16.44	36.14	50.88	97.32	77.24	1401.6	390.26	135.44	45.14	17.48
25	31.6	23.22	12.6	20.56	55.58	66.62	116.78	1014.98	416	130.5	41.94	14.66
26	32.6	36.8	12.6	36.14	53.88	83.4	204.28	749.14	469.48	124.98	41.78	23.64
27	32.6	36.8	12.6	28.5	74.18	77.24	116.24	557.68	376.4	116.24	42.6	14.64
28	31.78	17.18	19.78	44.86	44.44	24.14	106.8	426.32	282.6	114.38	41.4	16.5
29	31.6	50.86	24.4	24.4	141.8	69.54	177.24	279.44	237.5	168.24	43.6	30.14
30	31.6	30.56	25.32	102.42	16.44	150.54	122.94	204.4	160.8	160.8	16.6	14.66
31	32.6	31.78	110.5	110.5	148.42	141.74	97.32	341.74	97.32	97.32	15.22	15.22

Edit mean daily discharge / Gauge Height data. Edited data will change to the red character.  
 After edited, click the 'Entry Edited Data' button.

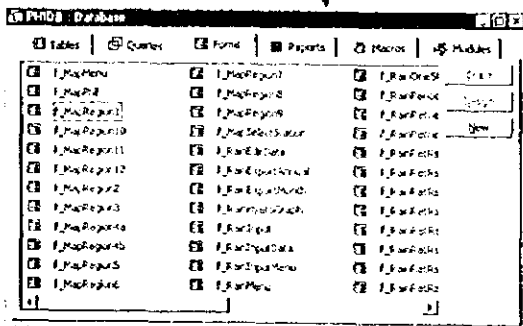
7) Add New Information of Streamflow Gauging Station on Regional Map



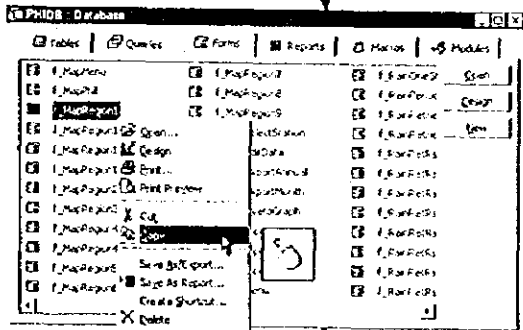
On the menu bar, click Window, and then click Unhide.



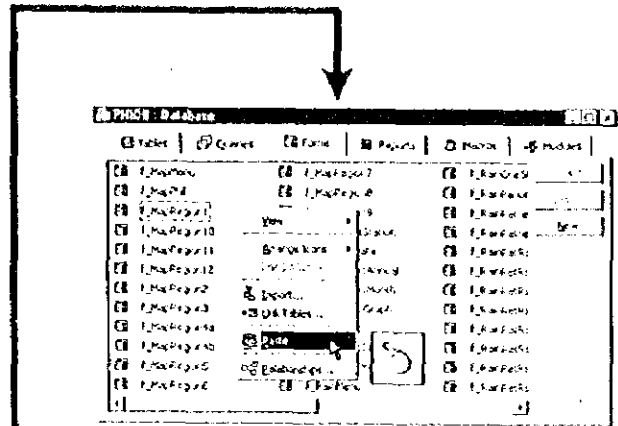
Select the 'PHILOB : Database', and then click 'OK' button.



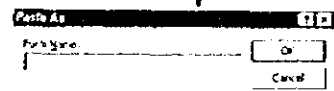
If you want to add new station in Region 1, open the form of 'I\_MapRegion1' as design mode. You should make tentative copy to safeguard original file against unfavorable change.



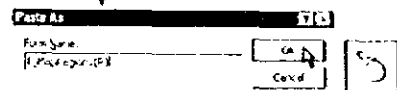
Select 'I\_MapRegion1', click the right mouse button, point to Copy, and then click it.



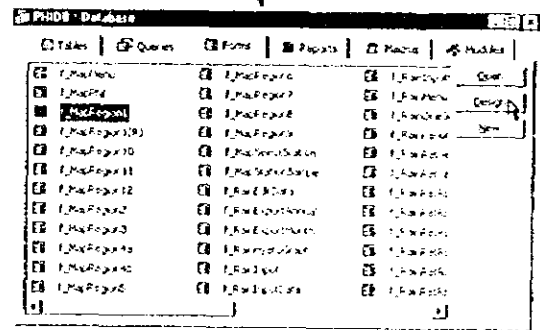
Select the empty part of window, click the right mouse button, and then click Paste.



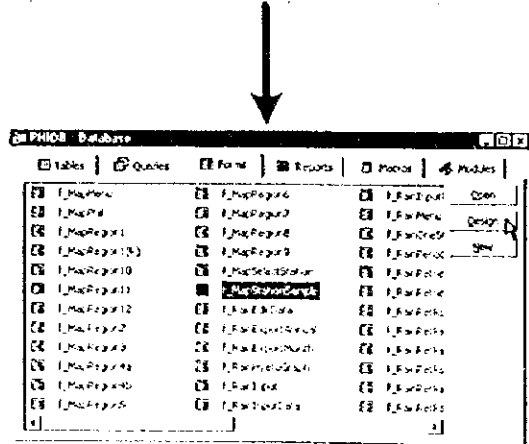
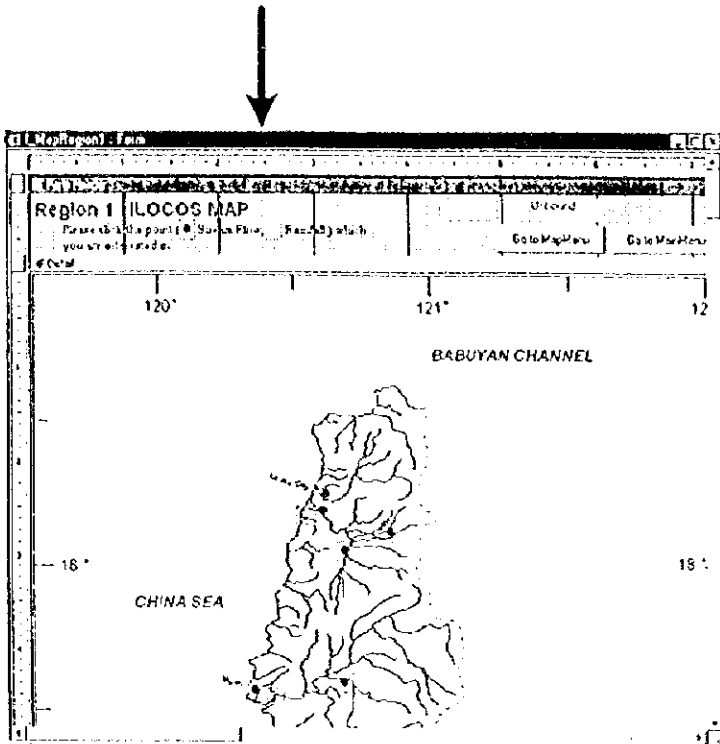
Enter the Form Name.



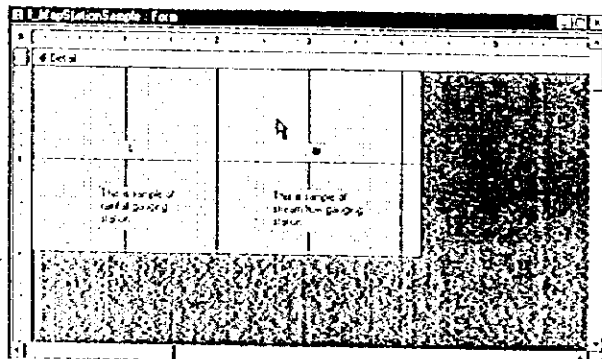
Click 'OK' button.



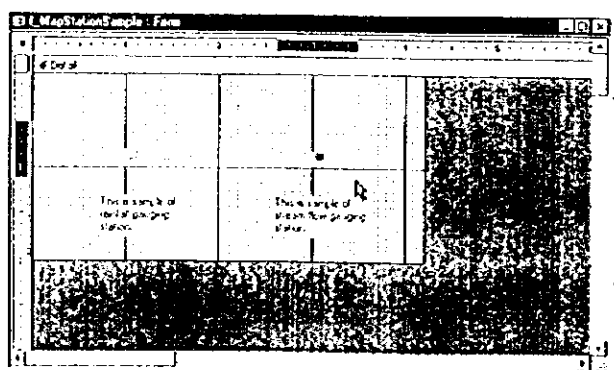
Select 'I\_MapRegion1', and then click 'Design' button.



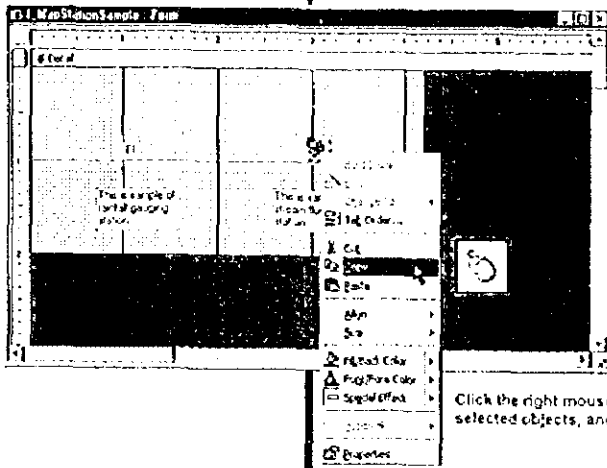
On the Database Window, select 'I\_MapStationSample', and then click 'Design' button.



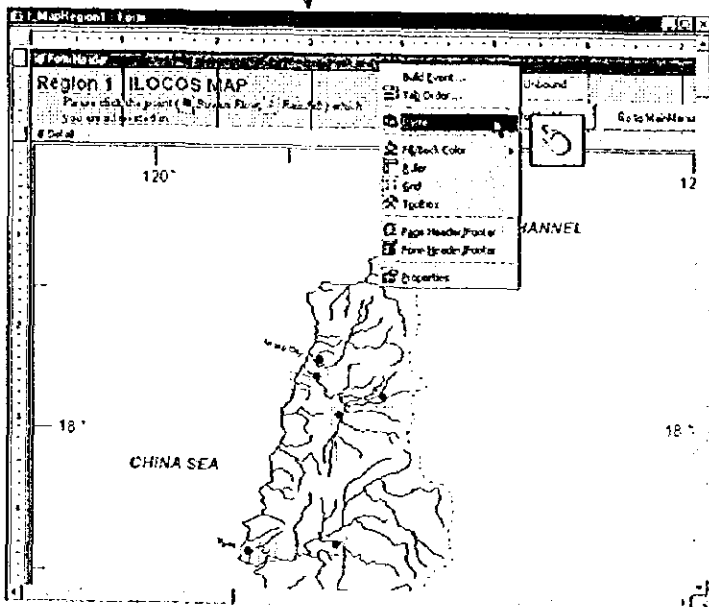
To select objects for stream flow gauging station, press and hold down the left mouse button, and point to where you want the objects.



And then release the mouse button.

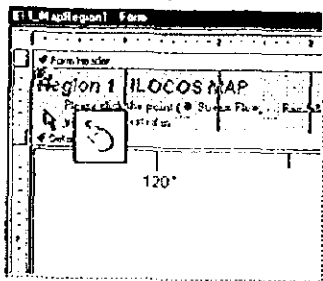


Click the right mouse button on selected objects, and then click Copy.

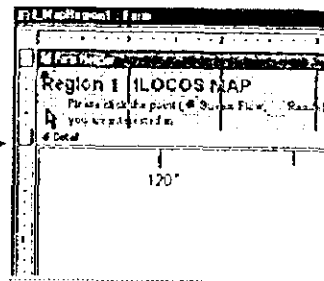


On the window of 'I\_MapRegion1', select the Form Header, and click the right mouse button, and then click Paste.

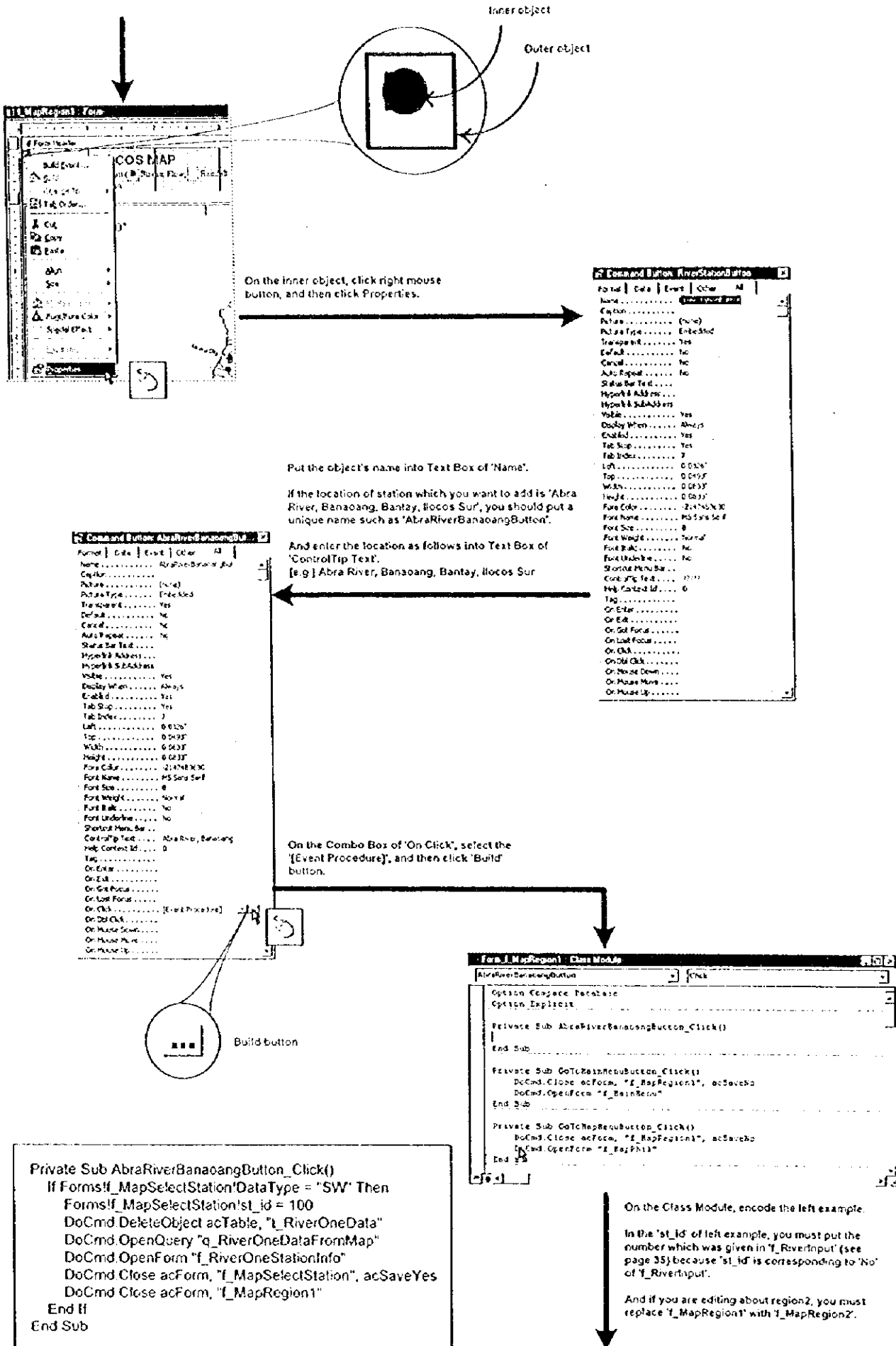
The objects will appear in the upper left corner.



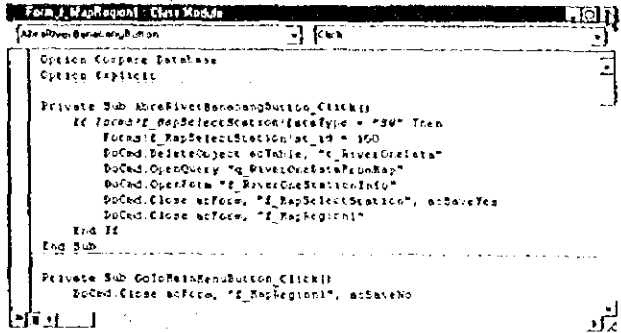
Click the empty part of window.







↓



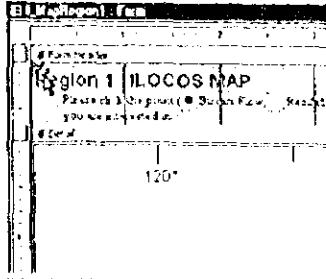
```

Form1_MapRegion1 Class Module
Attribute VB_Name = "Form1_MapRegion1"
Option Compare Database
Option Explicit

Private Sub MapRiverBarangayButton_Click()
    If TotalOf_MapSelectStation_LoadType = "SW" Then
        Form1_MapSelectStation_Load = 160
        DoCmd.DeleteObject acTable, "c_RiverGridata"
        DoCmd.OpenQuery "q_RiverGridataFromMap"
        DoCmd.OpenForm "f_RiverGridStationInfo"
        DoCmd.Close acForm, "f_MapSelectStation", acSaveYes
        DoCmd.Close acForm, "f_MapRegion1"
    End If
End Sub

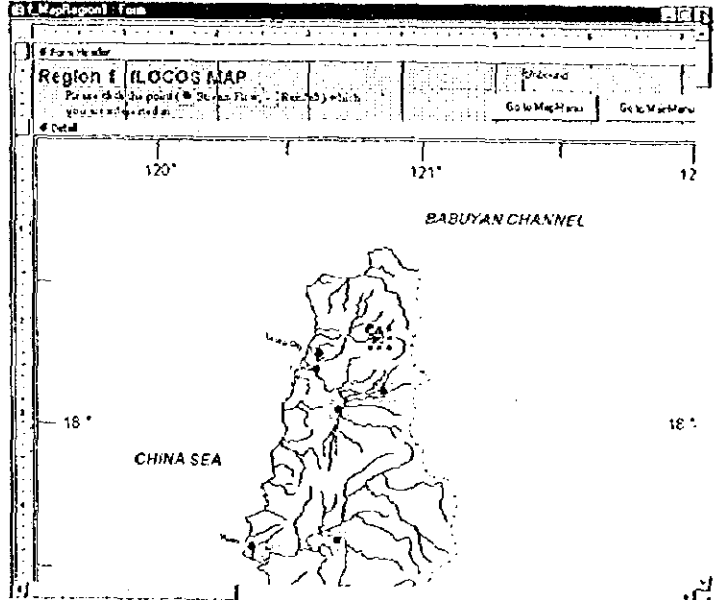
Private Sub GoToMainButton_Click()
    DoCmd.Close acForm, "f_MapRegion1", acSaveNo
            
```

After encoded, click the 'Close' button.

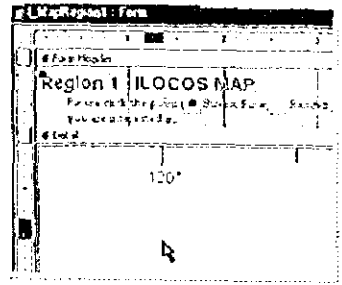


↓

Select two objects in the upper left corner.

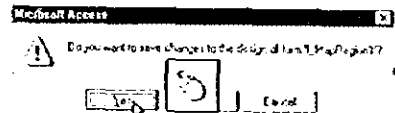


Click the 'Close' button.

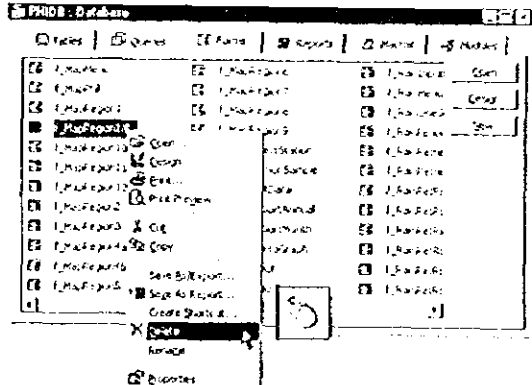


Press and hold down the left mouse button, and point to where you want to place, then release the mouse button.

↓




Click 'Yes' button.



Select the 'Form1\_MapRegion1' (R), click the right mouse button, and then click Delete  
 And click the 'Close' button.

### 3.3 Output Samples

#### 1) Mean Monthly Discharge Data Table

	<p>NATIONAL WATER RESOURCES BOARD</p> <p>MEAN MONTHLY DISCHARGE DATA TABLE</p>
---	--

STATION NAME : TENANE RIVER, TENANE, WRIGHT, SAMAR

DRAINAGE AREA : 392 sq.kms.

PERIOD OF TARGET YEARS : 1959 to 1996

MEAN MONTHLY DISCHARGE, IN CUBIC METER PER SECOND

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1959							13.71	12.73	10.24	9.44	24.32	100.19	
1960	26.34	14.44	11.79	15.41	12.12	25.43	18.37	19.13	10.81	81.61	48.32	13.17	21.32
1961	17.07	18.23	10.38	8.87	11.22	6.02	8.87	28.30	11.24	17.18	21.80	18.92	18.48
1962	25.63	18.23	18.07	7.74	12.81	16.81	20.28	21.90	28.84	26.02	33.47	25.96	22.02
1963	37.86	11.82	8.86	7.86	8.80	13.66	18.87	38.87	22.21	29.74	32.78	27.40	32.84
1964	14.08	21.82	11.41	10.14	13.59	8.09	18.36	10.84	16.80	18.78	88.10	41.44	24.82
1965	41.22	26.46	32.04	18.21	29.42	33.14	88.81	18.84	13.77	17.18	12.84	108.28	34.41
1966	18.49	18.78	8.45	8.55									
1967					7.59	8.87	8.82	15.09	9.53	14.87	31.80	23.73	
1968	30.31	30.15	12.89	8.79	8.44	8.93	18.36	11.04	8.18	11.87	58.26	27.12	15.48
1969	8.87	8.33	4.43	4.13	8.39	7.13	12.83	10.87	18.86	18.81	18.85	32.21	11.84
1970	28.81	17.46	1.83	8.34	9.37	8.40	18.30	16.77	19.43	36.86	41.37	38.84	19.14
1971	20.88	37.24	27.79			38.26	21.32	7.97	8.13	34.82	18.85	18.78	
1972	87.46	11.98	9.90	8.55	8.38	11.23		4.43	17.98	4.87	25.84	30.14	
1973	18.37	7.77	8.89	8.48	8.04	8.13	4.93	7.23	18.82	24.28	38.43	38.81	14.74
1974	14.26	13.26	18.38	7.84		31.27	16.62	11.85	8.88	34.28	48.80	41.84	
1975	84.70	18.78	18.80	18.51	8.78	12.31	12.13	19.81	14.95	11.77	9.96	81.84	23.84
1976	81.84	32.67	18.13	9.30	18.37	44.25				12.80	24.47		
1977													
1978	12.80	21.81	18.80	11.81	18.82	18.82	18.86	19.43	27.87	21.86	20.43	17.08	17.48
1979	14.32	11.13	7.78				11.58	8.63	12.32	15.13			
1980													
1981													
1982													
1983													
1984													
1985	79.77	80.77	14.81	12.00	17.75	21.75	30.24	12.13	18.88	28.20	28.50	18.29	28.18
1986	38.63	17.81	22.84	98.88			17.71	30.24	13.00	46.06	23.42	20.31	
1987	14.08	7.38		8.80	4.80	4.26	7.81	48.25	12.00	16.36	81.98	52.88	
1988	18.81	11.31	8.47	8.26	7.21	18.43	18.84				111.38	52.88	
1989	145.18	81.80	87.32	28.88	38.74	27.80	18.58	17.82	18.80	33.25			
1990	19.70	18.12	18.84	8.21	18.73	43.31	28.89	20.08	11.21	34.00	58.81	29.73	23.67
1991	20.18	20.23	21.08	23.18	20.31	27.88	25.21	18.30	14.80	21.84	37.11	37.88	24.30
1992	18.18	13.88	8.88	8.85	7.21	7.84	17.83	11.82	8.42	11.43	29.28	13.36	12.34
1993							18.87	18.28	14.81	17.25	28.14	43.63	
1994	37.27	22.84	12.40	21.18	12.08	23.80	48.38	18.08	38.97	24.54	18.80	42.70	23.42
1995	32.12	12.88	12.12	11.12	13.93	13.73	28.01	27.80	35.16	42.44	37.88	51.51	52.82
1996	74.48	28.13	81.84	52.58	18.88	18.48	13.83	8.82	13.43	18.30	43.88	181.73	60.73
MEAN	37.34	22.42	17.78	18.88	12.81	17.68	18.18	17.38	11.88	22.78	38.82	48.21	22.72

Note : Blank means that the data are not available

2) Flow Duration Curve

 <b>NATIONAL WATER RESOURCES BOARD</b>	<b>FLOW DURATION CURVE</b>
---	----------------------------

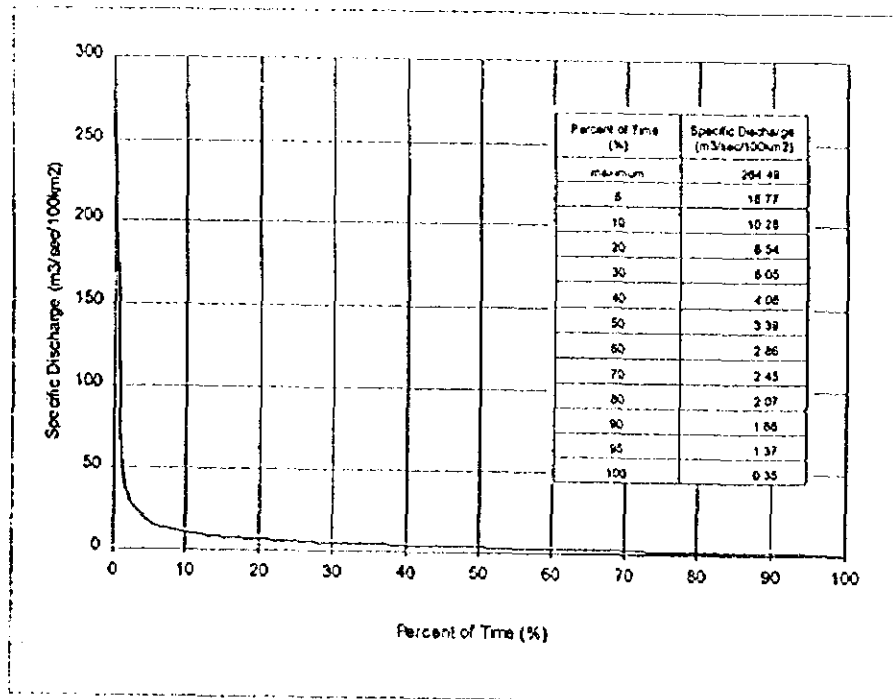
**Station Information**

Station Name : TENANE RIVER, TENANE, WRIGHT, SAMAR  
 Drainage Area : 392 sq.km  
 Period of Target Year : 1959 ~ 1996  
 Number of Available Data : 10,360

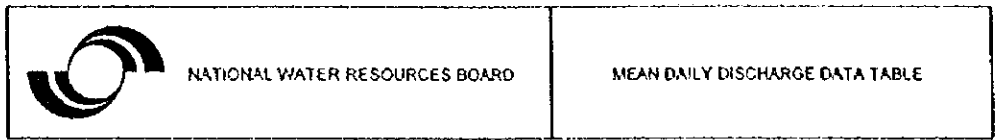
**Monthly and Annual Mean Discharge in cubic meter per second**

JAN	FEB	MAR	APR	MAY	JUN	
37.38	22.40	17.79	15.67	12.85	17.84	
JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
19.15	17.55	17.06	22.70	36.82	45.21	23.85

**Flow Duration Curve**



3) Mean Daily Discharge Data Table



Ulot River Basin

TENANE RIVER, TENANE, WRIGHT, SAMAR

LOCATION : Lat. 11° 48' 25" N, Long. 125° 08' 00" E  
 about 1 1/2 kms. from the town proper of Wright-Taft provincial road at Barrio Tenane.

DRAINAGE AREA : 392 sq.kms.

RECORDS AVAILABLE : 1959 to 1998

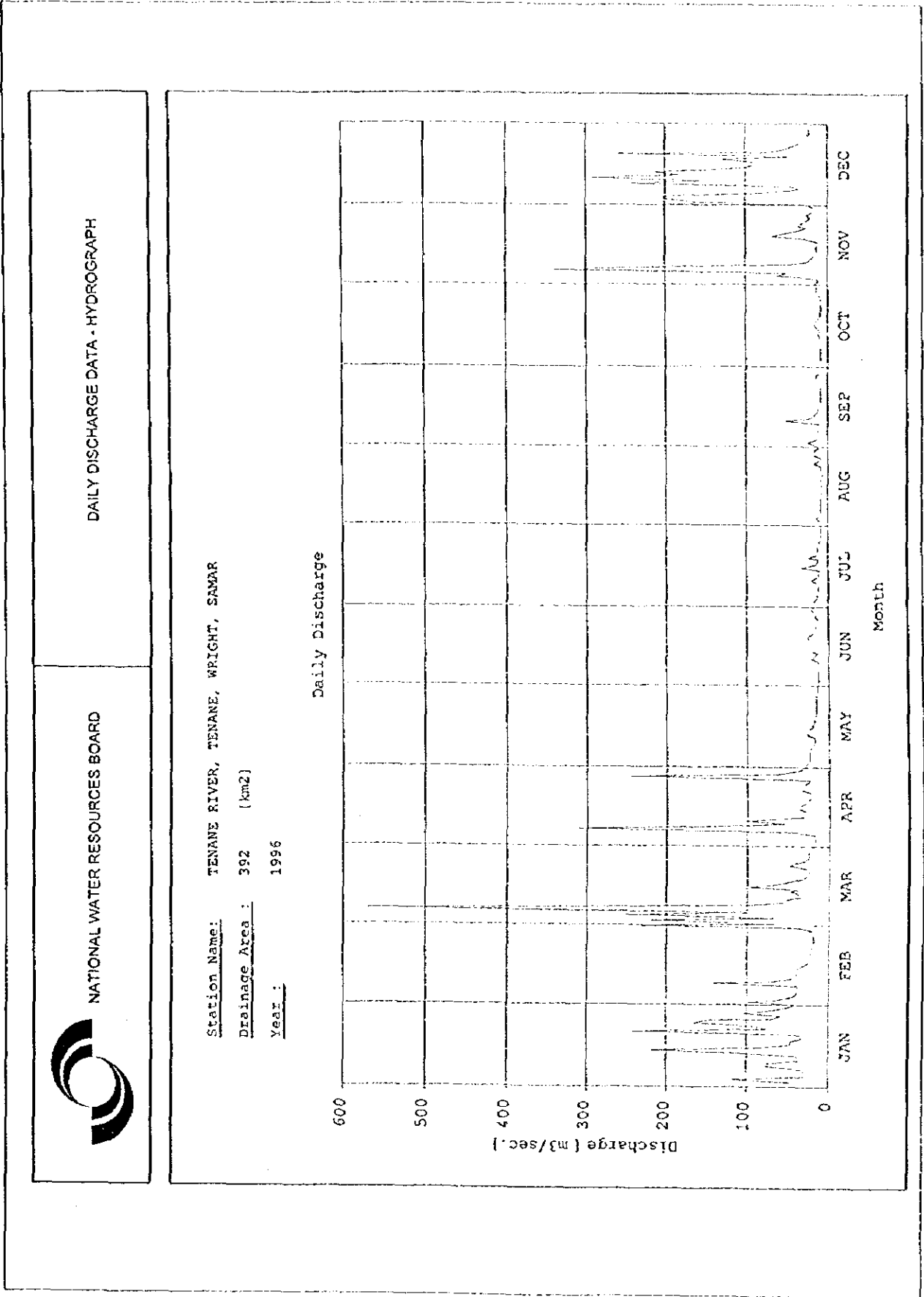
GAGE : Water-stage recorder. Elevation of zero of gage is 53.540 meters above Mean Sea Level. Prior to January 7, 1960, staff gage read two times a day at same site and datum.

DISCHARGE, IN CUBIC METER PER SECOND


1998

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	41.85	96.80	270.43	18.55	31.00	13.30	17.80	8.70	16.30	8.40	13.20	24.75
2	47.80	84.25	87.25	18.00	28.18	12.95	15.20	8.70	27.88	8.18	11.80	184.61
3	118.84	41.30	219.38	17.80	23.88	12.84	17.80	8.80	11.00	8.78	11.88	198.18
4	30.80	40.30	47.28	17.80	24.78	12.28	14.40	14.42	12.80	8.78	86.80	262.84
5	31.20	40.30	250.88	17.80	23.88	11.80	13.20	8.80	11.20	8.80	48.78	82.80
6	30.30	34.84	39.88	44.30	28.20	11.80	13.20	9.30	11.38	8.18	339.18	18.78
7	82.80	34.10	848.48	310.88	24.30	61.84	12.80	8.70	18.20	8.70	211.80	38.30
8	24.42	141.25	348.88	127.18	21.15	11.20	13.80	8.70	8.30	8.70	47.80	48.10
9	14.46	72.40	101.85	34.30	18.80	11.85	12.80	8.40	18.20	8.30	30.30	241.84
10	37.54	45.30	58.70	101.34	18.00	11.80	14.20	8.18	32.78	8.30	25.40	134.85
11	34.43	41.40	82.30	44.30	14.00	21.80	21.18	8.18	21.18	10.80	15.80	790.28
12	34.85	36.10	34.90	52.00	17.20	17.80	13.20	8.18	17.80	8.78	18.40	181.27
13	94.80	40.30	36.00	28.80	26.10	14.80	11.88	7.80	13.30	11.88	14.80	211.30
14	219.25	36.00	47.30	30.30	27.00	20.10	11.88	7.30	11.88	8.00	14.00	478.72
15	97.20	28.80	37.86	37.00	22.52	21.80	18.88	8.18	11.88	12.38	14.80	87.86
16	47.80	37.00	84.40	34.80	20.10	18.35	32.80	7.30	18.20	15.20	13.20	81.85
17	47.30	28.88	81.80	28.00	20.25	21.18	18.40	7.30	8.30	13.20	12.85	88.80
18	37.00	24.30	48.70	25.85	18.00	22.85	11.80	8.18	9.30	12.80	8.18	127.15
19	33.80	25.40	31.00	37.40	18.80	27.00	12.28	8.18	8.30	11.88	94.80	67.30
20	38.00	22.08	26.30	31.89	18.40	22.30	24.75	7.80	7.80	8.30	12.70	234.64
21	241.84	21.80	26.10	32.85	18.40	18.33	14.40	7.30	8.18	4.40	34.30	72.00
22	78.00	21.80	24.78	34.00	18.00	18.00	12.80	8.40	8.18	8.18	28.18	82.10
23	81.88	20.10	24.78	31.80	18.00	15.20	12.80	8.70	8.40	8.18	28.30	43.18
24	183.48	20.10	48.10	28.30	18.80	13.20	11.88	8.18	9.80	8.78	31.80	35.80
25	148.85	18.80	40.30	25.20	13.20	14.00	18.30	18.80	11.88	7.80	25.88	31.90
26	88.00	18.80	28.30	22.05	18.80	12.85	8.80	18.20	14.80	8.30	30.25	28.00
27	98.80	18.35	25.20	243.00	18.40	18.00	8.80	8.30	14.40	8.18	25.88	28.18
28	102.05	21.18	25.25	81.25	13.20	14.40	8.80	18.00	18.65	12.25	18.80	25.40
29	84.80	35.00	25.85	40.85	18.40	18.80	8.30	18.00	8.80	18.80	47.80	23.50
30	81.80		22.85	33.30	14.00	20.25	8.30	18.40		14.30	18.80	23.00
31	40.85		21.15		14.00		8.30	18.50		14.80		20.18
TOTAL	2304.88	1134.84	2919.82	1178.85	808.80	184.25	424.33	204.50	249.13	318.18	1307.80	2154.33
MEAN	74.48	35.15	91.84	37.87	26.08	18.48	13.68	6.62	13.22	10.30	42.58	104.73
MAX	241.84	141.25	848.48	310.88	31.00	37.00	32.30	14.00	32.78	13.20	338.15	280.28
MIN	24.00	18.15	21.15	17.80	14.00	11.20	8.30	7.30	8.18	7.80	11.54	28.18
LSQK	184.84	89.83	233.78	134.08	80.18	42.07	33.25	25.06	34.27	28.28	111.18	258.38
OK	50.84	25.01	82.82	34.78	13.44	18.88	8.14	8.11	8.38	7.82	28.82	88.32
KA-X	184.44	88.05	243.48	134.25	82.7	42.78	32.1	28.1	34.88	27.1	112.7	272.2
ANNUAL TOTAL	2304.88	1134.84	2919.82	1178.85	808.80	184.25	424.33	204.50	249.13	318.18	1307.80	2154.33
MEAN	74.48	35.15	91.84	37.87	26.08	18.48	13.68	6.62	13.22	10.30	42.58	104.73
MAX	241.84	141.25	848.48	310.88	31.00	37.00	32.30	14.00	32.78	13.20	338.15	280.28
MIN	24.00	18.15	21.15	17.80	14.00	11.20	8.30	7.30	8.18	7.80	11.54	28.18
LSQK	184.84	89.83	233.78	134.08	80.18	42.07	33.25	25.06	34.27	28.28	111.18	258.38
OK	50.84	25.01	82.82	34.78	13.44	18.88	8.14	8.11	8.38	7.82	28.82	88.32
KA-X	184.44	88.05	243.48	134.25	82.7	42.78	32.1	28.1	34.88	27.1	112.7	272.2

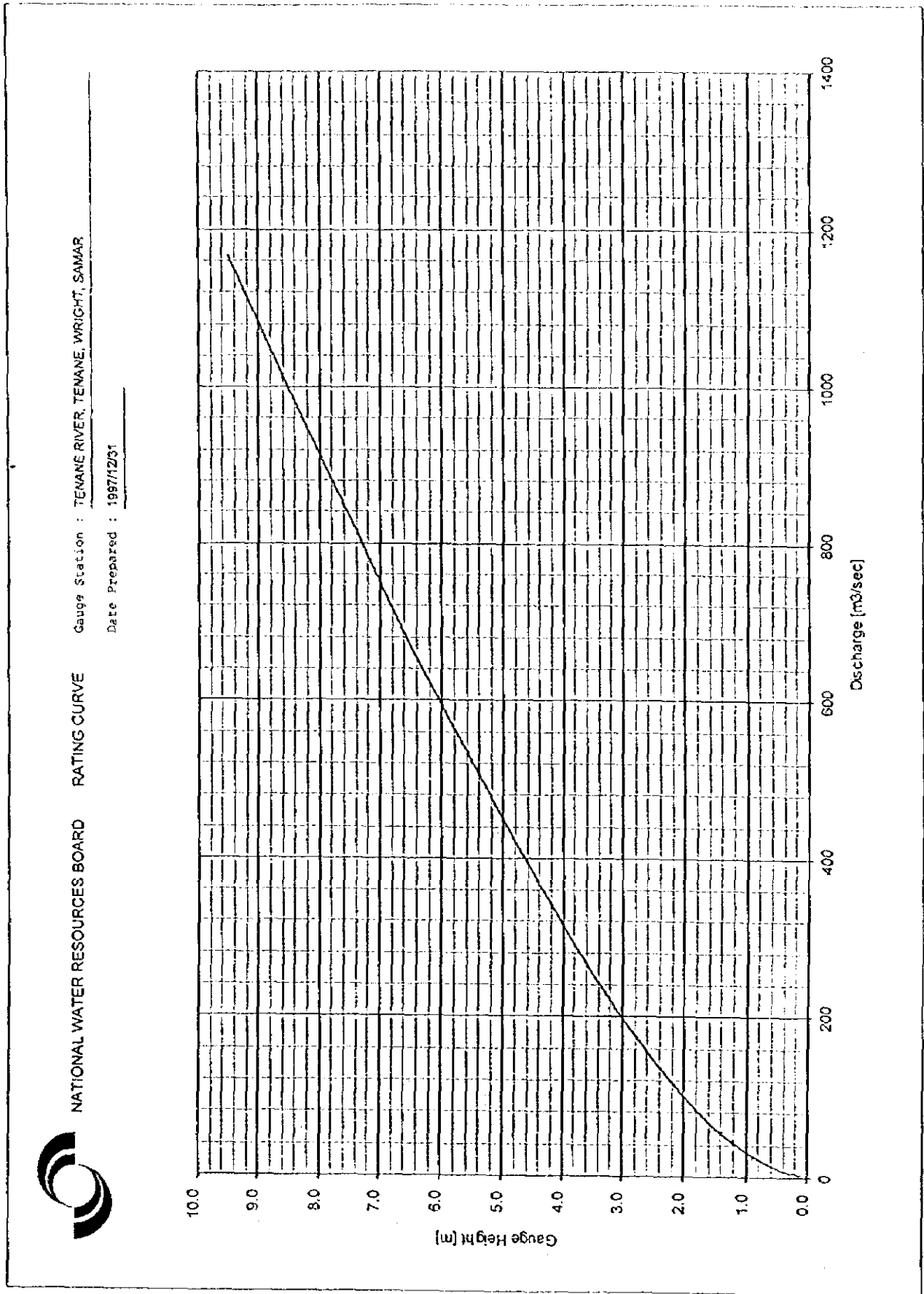
4) Annual Hydrograph



5) Rating Table

 NATIONAL WATER RESOURCES BOARD		RATING TABLE									Station Code : V134_1
Date Prepared : 1997/12/31											
Gauge Station : TENANE RIVER, TENANE, WRIGHT, SAMAR											
Gauge Height in meter, Discharge in cubic meter per second.											
Gauge Height	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09	Difference
0.0											
0.1	3 500	3 600	3 700	3 800	3 900	4 000	4 100	4 200	4 300	4 400	
0.2	4 500	4 600	4 700	4 800	4 900	5 000	5 100	5 200	5 300	5 400	
0.3	5 500	5 700	5 900	6 100	6 300	6 500	6 700	6 900	7 100	7 300	
0.4	7 500	7 800	8 100	8 400	8 700	9 000	9 300	9 600	9 900	10 200	
0.5	10 500	10 850	11 200	11 550	11 900	12 250	12 600	12 950	13 300	13 650	
0.6	14 000	14 400	14 800	15 200	15 600	16 000	16 400	16 800	17 200	17 600	
0.7	18 000	18 450	18 900	19 350	19 800	20 250	20 700	21 150	21 600	22 050	
0.8	22 500	22 950	23 400	23 850	24 300	24 750	25 200	25 650	26 100	26 550	
0.9	27 000	27 500	28 000	28 500	29 000	29 500	30 000	30 500	31 000	31 500	
1.0	32 000	32 500	33 000	33 500	34 000	34 500	35 000	35 500	36 000	36 500	
1.1	37 000	37 550	38 100	38 650	39 200	39 750	40 300	40 850	41 400	41 950	
1.2	47 500	43 100	43 700	44 300	44 900	45 500	46 100	46 700	47 300	47 900	
1.3	48 500	49 100	49 700	50 300	50 900	51 500	52 100	52 700	53 300	53 900	
1.4	54 600	55 100	55 700	56 300	56 900	57 500	58 100	58 700	59 300	59 900	
1.5	60 500	61 250	62 000	62 750	63 500	64 250	65 000	65 750	66 500	67 250	
1.6	68 000	68 800	69 600	70 400	71 200	72 000	72 800	73 600	74 400	75 200	
1.7	78 000	78 800	77 600	78 400	79 200	80 000	80 800	81 600	82 400	83 200	
1.8	84 000	84 800	85 600	86 400	87 200	88 000	88 800	89 600	90 400	91 200	
1.9	92 000	92 850	93 700	94 550	95 400	96 250	97 100	97 950	98 800	99 650	
2.0	100 500	101 350	102 200	103 050	103 900	104 750	105 600	106 450	107 300	108 150	
2.1	109 000	109 875	110 750	111 625	112 500	113 375	114 250	115 125	116 000	116 875	
2.2	117 750	118 690	119 630	120 570	121 510	122 450	123 390	124 330	125 270	126 210	
2.3	127 150	128 090	129 030	129 970	130 910	131 850	132 790	133 730	134 670	135 610	
2.4	136 550	137 490	138 430	139 370	140 310	141 250	142 190	143 130	144 070	145 010	
2.5	145 950	146 950	147 950	148 950	149 950	150 950	151 950	152 950	153 950	154 950	
2.6	155 950	157 005	158 060	159 115	160 170	161 225	162 280	163 335	164 390	165 445	
2.7	166 500	167 555	168 610	169 665	170 720	171 775	172 830	173 885	174 940	175 995	
2.8	177 050	178 105	179 160	180 215	181 270	182 325	183 380	184 435	185 490	186 545	
2.9	187 600	188 655	189 710	190 765	191 820	192 875	193 930	194 985	196 040	197 095	
3.0	198 150	199 260	200 370	201 480	202 590	203 700	204 810	205 920	207 030	208 140	
3.1	209 250	210 375	211 500	212 625	213 750	214 875	216 000	217 125	218 250	219 375	
3.2	220 500	221 625	222 750	223 875	225 000	226 125	227 250	228 375	229 500	230 625	
3.3	231 750	232 875	234 000	235 125	236 250	237 375	238 500	239 625	240 750	241 875	
3.4	243 000	244 125	245 250	246 375	247 500	248 625	249 750	250 875	252 000	253 125	
3.5	254 250	255 450	256 650	257 850	259 050	260 250	261 450	262 650	263 850	265 050	

6) Rating Curve





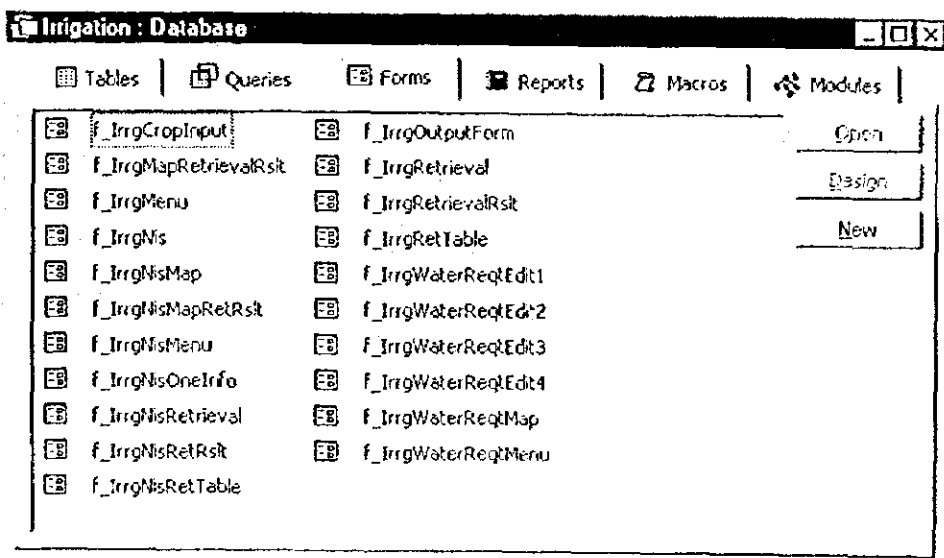
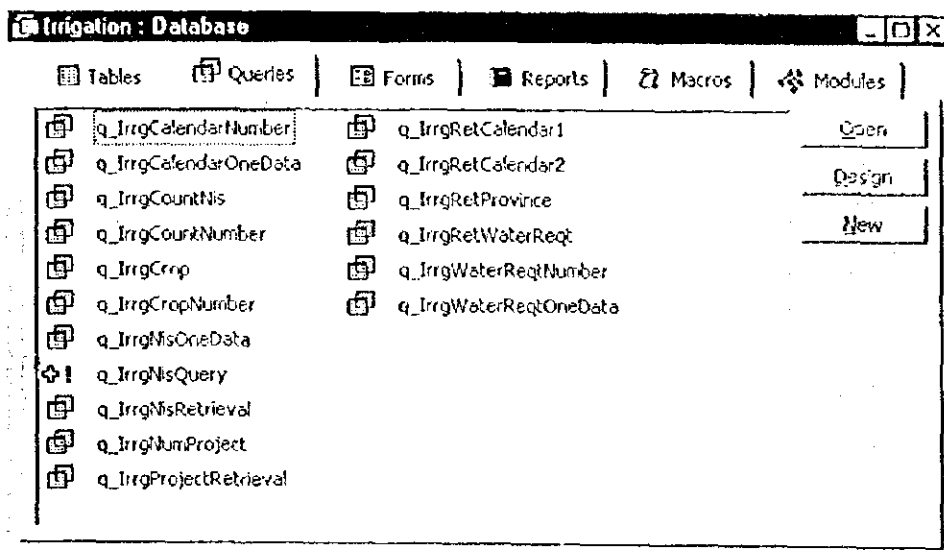
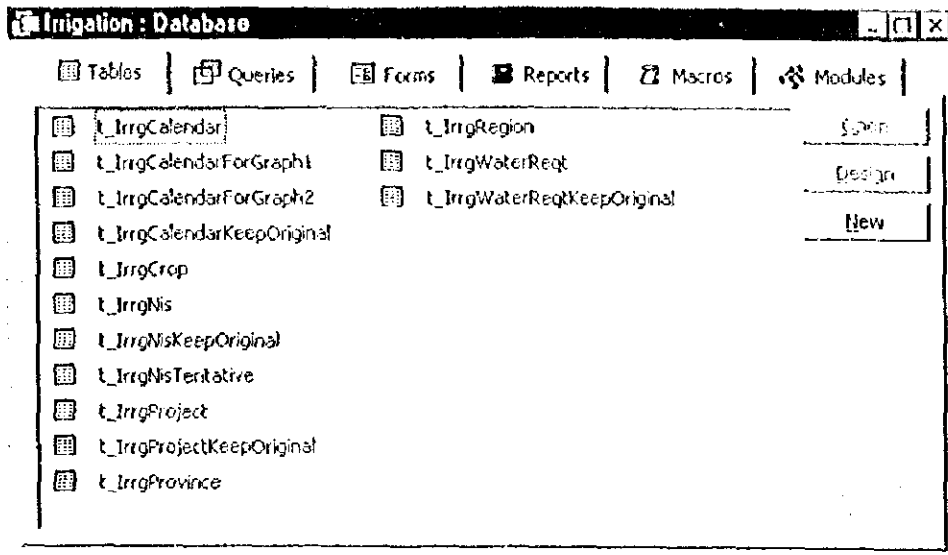
## Chapter 4

# Irrigation Database

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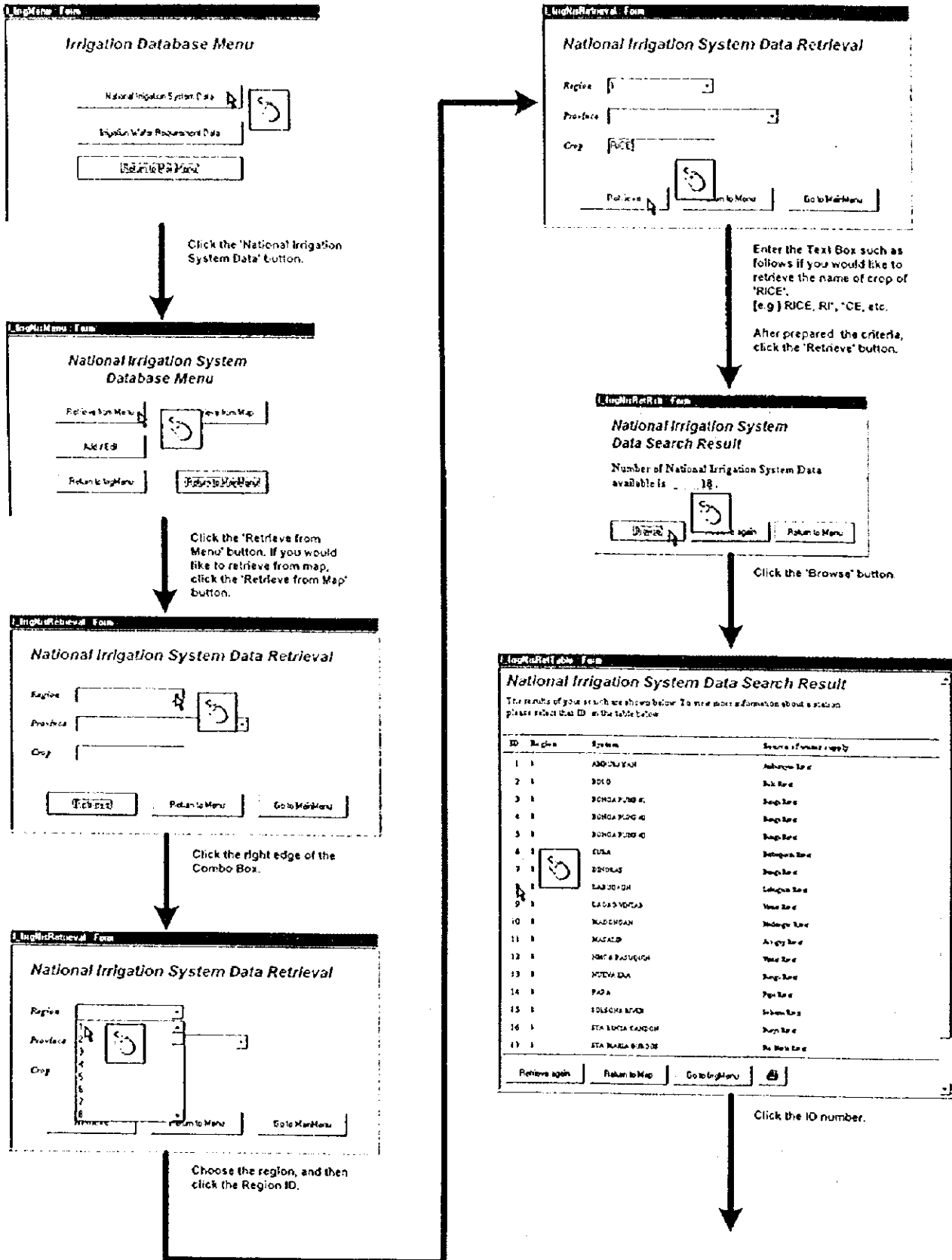
## 4.1 Database Components



## 4.2 National Irrigation System Data

### 4.2.1 How to Retrieve

#### 1) Using Retrieval Menu



Confirmation

You selected [OK]

Click the 'OK' button.

EnglishMdb - Form

Salient Features of National Irrigation System

NATIONAL WATER RESOURCES BOARD

SALENT FEATURES OF NATIONAL IRRIGATION SYSTEM

Name of System	LALINGAYON		Lalagingayon River	
1) Water Resource Region	2	2) Source of Water Supply		
3) Region & Water Right	0044	6) Official Opening of the System	Apr 1990	
4) Original Construction Cost	P 12,505,741.21	9) Date of Rehabilitation	Aug - Sept 1993	
5) Cost of Rehabilitation	P 3,858,122.00	8) Current Status	Operating System	
7) Period of Service Area	1992	10) District Area	1861	
11) Period of Use	1994	12) Number of Beneficiaries		
13) Number of Farmers Served	2251	14) Average Farm Size	0.21	
15) Number of Crops		16) Diversion Type	Diversion Dam	
17) Diversion Capacity	8,707	18) Length of Main Canal	11,808	
19) Length of Branches	17,342	20) Number of Turnouts	112	
21) Length of Service Roads	8,700	22) Length of Access Roads	10679	
23) Drainage Density		24) Farmstead Density	11.04	
25) Climatic Condition (Season)	Type II	25) Average Annual Rainfall	7.8	
27) Main Crops	Rice			
28) Town / Province Served	Ecane Subera Dagupan	Province	Bungay	
			12248 1221	
		Total	1901	

2) Using Retrieval Map

EnglishMdb - Form

National Irrigation System Database Menu

Retrieve from Menu | Retrieve from Map

Add / Edit | Return to Menu

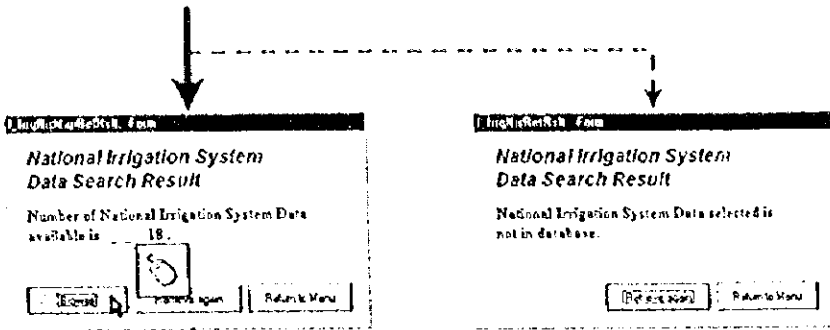
Click the 'Retrieve from Map' button.

EnglishMdb - Form

Retrieve National Irrigation System Data from Philippines Map

Region 1 | Region 2 | Region 3 | Region 5

Click the province / region on the philippines map.

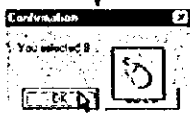


Click the 'Browse' button.

**National Irrigation System Data Search Result**  
 The number of years each are shown below. To view more information about a station please select the ID in the table below.

ID	Region	System	Source of water supply
1	1	AMULAYAN	Surface flow
2	1	BKD	Canal flow
3	1	BONDAPURINGI	Canal flow
4	1	BONDAPURINGI	Canal flow
5	1	BONDAPURINGI	Canal flow
6	1	CLRA	Surface flow
7	1	EDONAS	Canal flow
8	1	LAKSHMI	Surface flow
9	1	LAKSHMI	Surface flow
10	1	MUDHAPUR	Surface flow
11	1	MUSALI	Canal flow
12	1	MUSALI	Canal flow
13	1	MUSALI	Canal flow
14	1	MUSALI	Canal flow
15	1	MUSALI	Canal flow
16	1	MUSALI	Canal flow
17	1	MUSALI	Canal flow

Click the ID number.

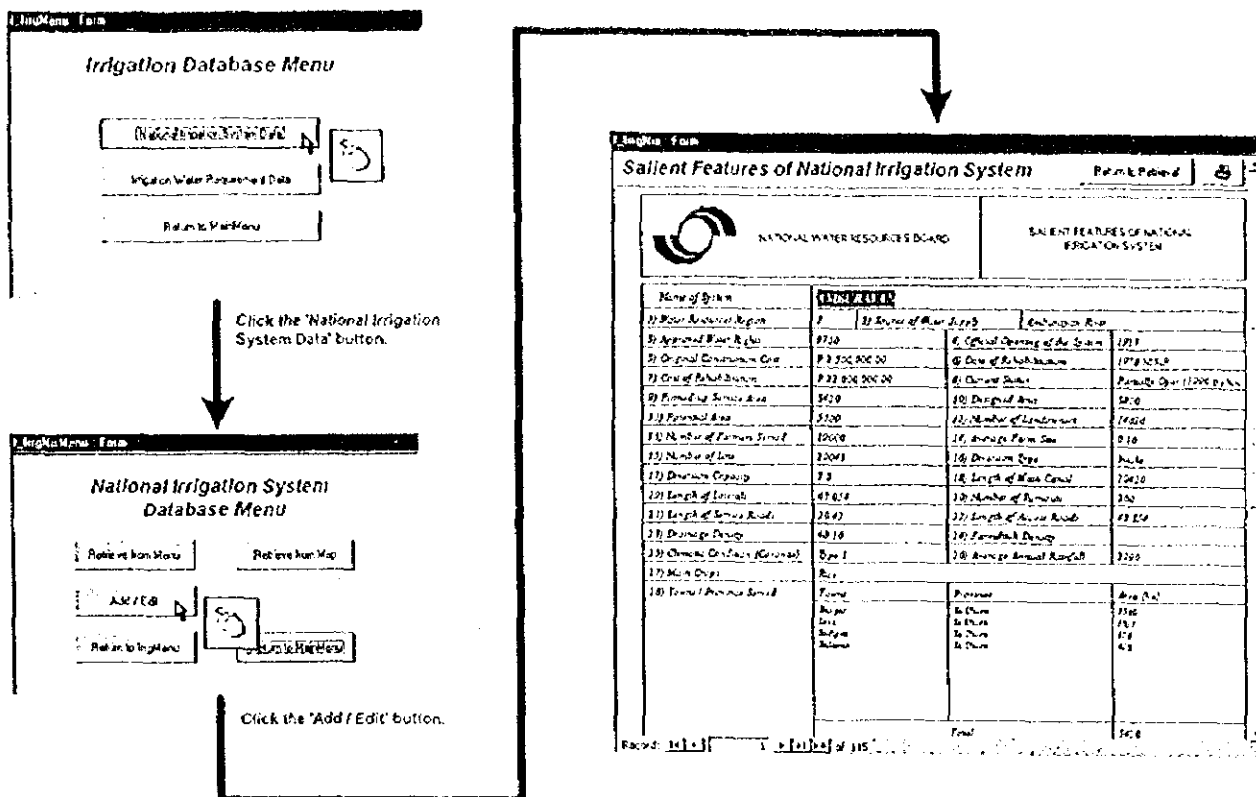


Click the 'OK' button.

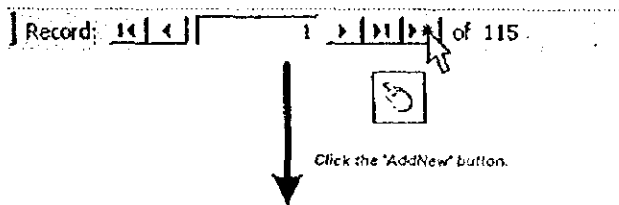
**Saillant Features of National Irrigation System**

Name of System	LA BUNGALON		
1) Water Resources Region	1	2) Source of Water Supply	Canal from River
3) Approved Water Right	60M	4) Official Opening of the System	Jan. 1960
5) Original Construction Cost	P. 11,500,000.00	6) Date of Rehabilitation	Aug. Sept. 1965
7) Cost of Rehabilitation	P. 1,800,000.00	8) Current Status	Operating System
9) Furred up Service Area	1956	10) Design Area	1951
11) Potential Area	1956	11) Number of Landowners	
12) Number of Farmers Served	2155	12) Average Farm Size	8.91
13) Number of Lanes		13) Diversion Type	Diversion Dam
14) Diversion Capacity	1100	14) Length of Main Canal	11.846
15) Length of Lanes	17.342	15) Number of Turnoffs	111
16) Length of Service Roads	8.190	16) Length of Access Road	154.70
17) Drainage Design		17) Farmstead Service	31.08
18) Climate Condition (Normal)	Typ. II	18) Average Annual Rainfall	2.6
19) Main Crop	Rice		
20) Lowest Province Served	Texas	Province	Area (ha)
	Dipolog	San Jose	1650.0
		San Jose	1222
		<b>Total</b>	<b>2872</b>

4.2.2 How to Add / Edit



1) Add New Data



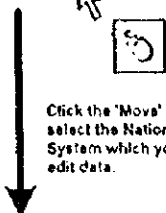
**Salient Features of National Irrigation System**

Name of System	UNIVERSITY		
	1) Water Resources Region	2) Source of Water Supply	3) Extension Area
4) Approved Water Rights		6) Official Opening of the System	
5) Original Construction Cost		7) Date of Rehabilitation	
8) Cost of Rehabilitation		9) Current Status	
9) Formed up Service Area		10) Damaged Area	
11) Potential Area		11) Number of Landowners	
12) Number of Farming Units		12) Average Farm Size	
13) Number of Inns		13) Diversion Type	
14) Diversion Capacity		14) Length of Main Canal	
15) Length of Laterals		15) Number of Turnouts	
16) Length of Service Roads		16) Length of Access Roads	
17) Drainage Density		17) Farmstead Density	
18) Climate Condition (Normal)		18) Average Annual Rainfall	
19) Main Canal			
20) Total / Potential Service	Total	Partially	Area (Ac)

Enter the data into the Text Box of salient features, and then click 'Return to Retrieve' button.

2) Edit Data

Record: 14 of 115



Click the 'Move' button to select the National Irrigation System which you want to edit data.

**Salient Features of National Irrigation System**

NATIONAL WATER RESOURCES BOARD

SALIENT FEATURES OF NATIONAL IRRIGATION SYSTEM

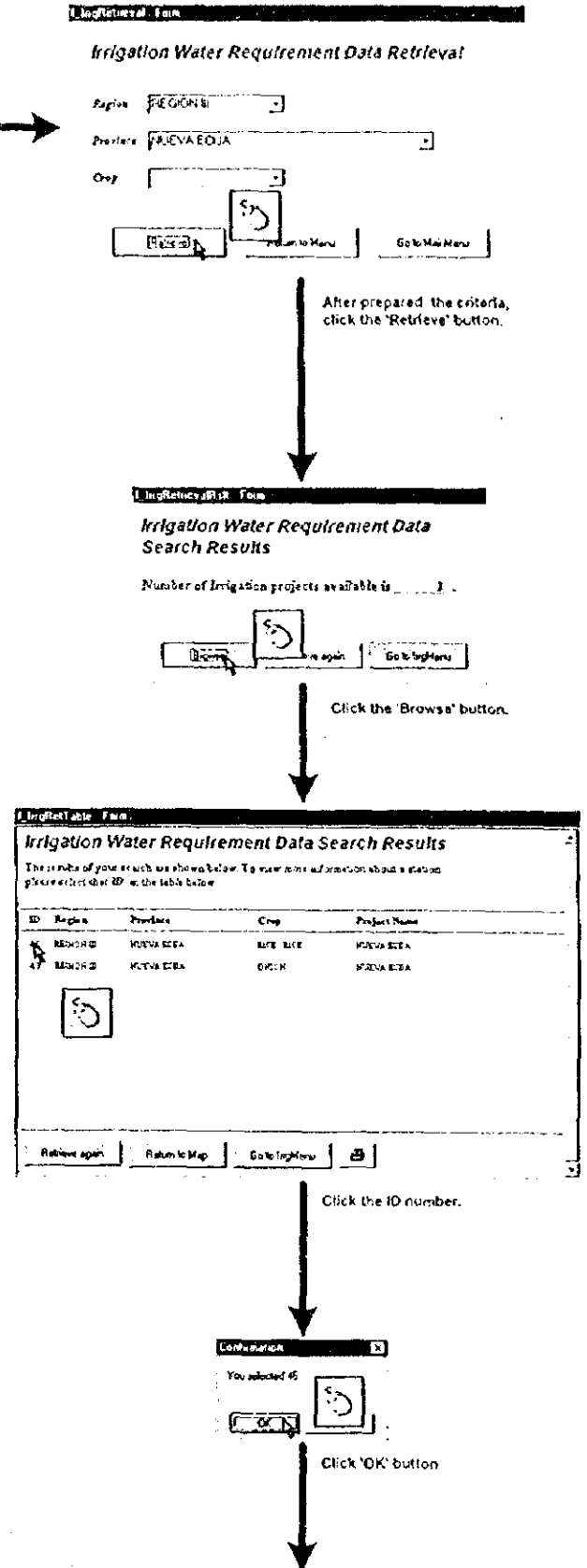
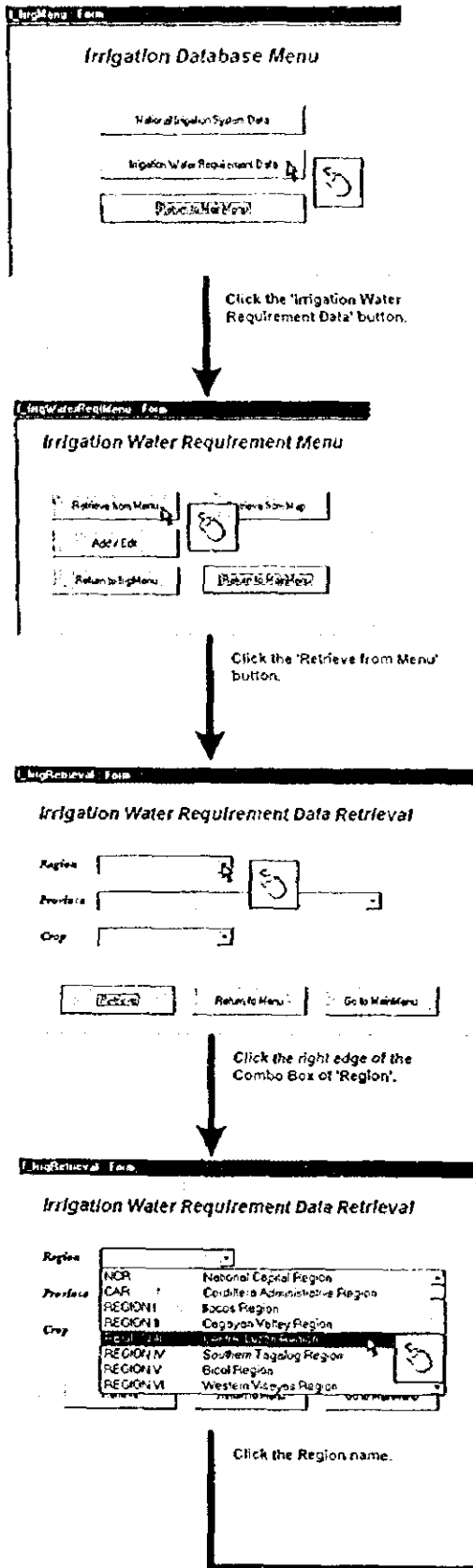
Name of System	CONTRIBUTION		
1) Water Resource Region	1	2) Source of Water Supply	Andhra Pradesh
3) Approx. Water Rights	8730	4) Official Opening of the System	1973
5) Original Construction Cost	P.2,200,000.00	6) Date of Rehabilitation	1978, NCSP
7) Cost of Rehabilitation	P.22,000,000.00	8) Current Status	Partly Op. (1996-97)
9) Period of Service Area	5420	10) Designed Area	3420
11) Protected Area	1500	12) Number of Landowners	24,500
13) Number of Farmers Served	12000	14) Average Farm Size	0.10
15) Number of Cuts	20001	16) Duration Days	200.0
17) Duration Capacity	7.2	18) Length of Main Canal	20000
19) Length of Laterals	65,054	20) Number of Branches	100
21) Length of Service Roads	28.73	22) Length of Access Roads	69,554
23) Channel Density	48.10	24) Farmstead Density	
25) Channel Construction Material	Soil	26) Average Annual Rainfall	1200
27) Main Crop	Rice		
28) Total Investment Served		Per Annum	Area (Ha)
	Soil	So. Pans	1500
	Canal	So. Pans	18.1
	Subsidy	So. Pans	11.4
	Interest	So. Pans	6.9
		Total	3420

Record: 14 of 115

Edit the data into the Text Box of salient features, and then click 'Return to Retrieval' button.

### 4.3 Irrigation Water Requirement Data

#### 4.3.1 How to Retrieve





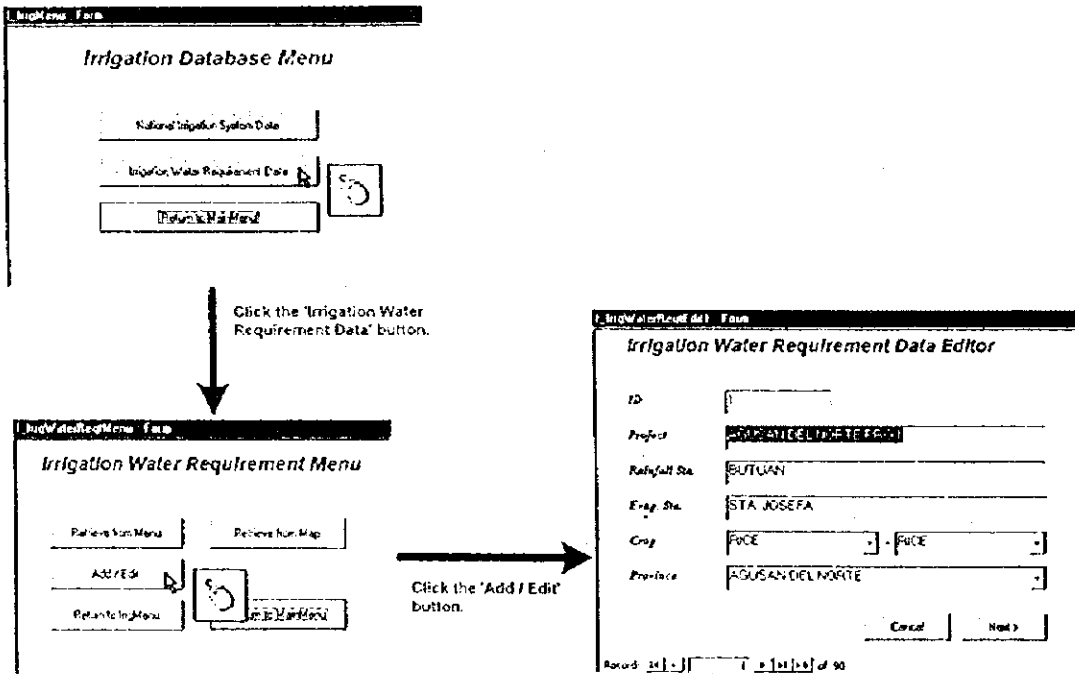
**Irrigation Water Requirement Data Search Results**

Note: Page 3: RUEVA TOJA (RAINFALL STA + CADANATAN, EVAP STA + OLSU)

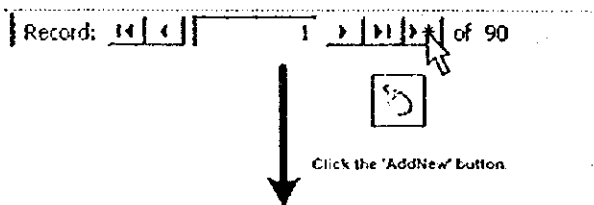
MONTH	JAN			FEB			MAR			APR			MAY			JUN			JUL			AUG			
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	
DECADE																									
RICE - RICE																									
RAINFALL DATA	0	1	1	0	0	1	1	1	1	1	2	2	11	19	20	24	30	36	45	35	65	57	54	47	
EVAP DATA	57	57	63	66	68	53	71	71	78	76	79	79	64	64	70	49	45	49	43	43	47	35	35	39	39
LAND SOAK/FLOOD	0	0	0	0	0	0	0	0	0	0	0	0	0	25	27	29	0	0	0	0	0	0	0	0	
EVAP TRANS	63	61	46	23	2	0	0	0	0	0	0	0	0	18	40	45	51	52	47	47	51	39	39	42	31
DEEP PERCOLATION	17	16	12	5	0	0	0	0	0	0	0	0	0	4	10	15	17	17	17	17	17	17	18	12	
CROP WATER REQ	80	77	58	29	3	0	0	0	0	0	0	0	0	42	77	88	75	70	63	53	70	55	55	60	43
EFF RAINFALL	0	1	0	0	0	0	0	0	0	0	0	0	0	5	13	28	24	30	36	45	35	55	55	53	36
CROP IRR REQ	79	77	58	29	3	0	0	0	0	0	0	0	0	38	64	61	51	47	28	18	35	0	0	7	7

Evap/Trans   
  Land/Soak/Flood   
  Crop/Maintenance   
  Drainage   
  Harvest

4.3.2 How to Add / Edit



1) Add New Data



Form  
Irrigation Water Requirement Data Editor

ID:

Project:

Rainfall Sta:

Evap. Sta:

Crop:

Province:

Cancel    Next >

Row: 11/13    Page: 1/1 of 1

Enter the information into the Text Box or Combo Box of 'Project', 'Rainfall Sta.', 'Evap. Sta.', 'Crop', 'Province'.  
If you can not find the crop in the Combo Box of 'Crop', refer to the procedure of Page 68.

Form  
Irrigation Water Requirement Data Editor

ID:

Project: METROMANILA PROJECT

Rainfall Sta: MANILA

Evap. Sta: MANILA

Crop: RICE

Province: METROMANILA

Cancel    Next >

Row: 11/13    Page: 1/1 of 1

Click 'Next >' button.

Form  
Irrigation Water Requirement Data Editor

JAN			FEB			MAR			APR			MAY			JUN		
1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3

JUL			AUG			SEP			OCT			NOV			DEC		
1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3

Legend: 0=Land Salting    1=Land Reclamation    2=Crop Maintenance    3=Drainage    4=Irrigated

<Back    Next >

Enter the character of legend into the Text Box.

Form  
Irrigation Water Requirement Data Editor

JAN			FEB			MAR			APR			MAY			JUN		
1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3

JUL			AUG			SEP			OCT			NOV			DEC		
1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3

Legend: 0=Land Salting    1=Land Reclamation    2=Crop Maintenance    3=Drainage    4=Irrigated

<Back    Next >

Click 'Next >' button.

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Irrigation Water Requirement Data Editor

	JAN			FEB			MAR			APR			MAY			JUN		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
RAINFALL DATA																		
EVAP DATA																		
LAND SOAK/FLOOD																		
EVAP/TRANS																		
DEEP PERCOLATION																		
CROP WATER REGT																		
EFF RAINFALL																		
CROP BRG REGT																		
OVERALL EFF																		
DIVERSION REGT																		
W/DUTY (USA)																		
	JUL			AUG			SEP			OCT			NOV			DEC		
RAINFALL DATA																		
EVAP DATA																		
LAND SOAK/FLOOD																		
EVAP/TRANS																		
DEEP PERCOLATION																		
CROP WATER REGT																		
EFF RAINFALL																		
CROP BRG REGT																		
OVERALL EFF																		
DIVERSION REGT																		
W/DUTY (USA)																		

<Back   Next>

Enter the data into the Text Box.

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Irrigation Water Requirement Data Editor

	JAN			FEB			MAR			APR			MAY			JUN		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
RAINFALL DATA	75	18	28	18	17	9	28	19	11	5	6	13	8	12	12	22	17	
EVAP DATA	42	42	46	33	26	38	38	39	43	38	38	43	42	47	36	36	36	
LAND SOAK/FLOOD	0	0	0	0	0	0	0	0	0	0	0	0	0	36	24	28	0	
EVAP/TRANS	45	45	49	33	12	1	0	0	0	0	0	0	0	11	22	36	40	
DEEP PERCOLATION	20	20	21	13	6	1	0	0	0	0	0	0	0	5	12	16	20	
CROP WATER REGT	66	66	62	36	18	2	0	0	0	0	0	0	0	44	57	82	68	
EFF RAINFALL	25	18	29	14	2	1	0	0	0	0	0	0	0	5	8	23	17	
CROP BRG REGT	41	48	40	22	11	1	0	0	0	0	0	0	0	40	49	60	51	
OVERALL EFF	55	55	55	55	55	55	0	0	0	0	0	0	0	45	45	45	45	
DIVERSION REGT	75	87	73	42	20	1	0	0	0	0	0	0	0	88	109	132	113	
W/DUTY (USA)	0.87	1.01	0.77	0.45	0.23	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.93	1.26	1.53	1.31	
	JUL			AUG			SEP			OCT			NOV			DEC		
RAINFALL DATA	30	5	2	14	8	25	10	7	23	21	18	2	15	11	22	22	19	
EVAP DATA	36	36	40	37	37	40	36	36	36	35	35	39	32	32	33	33	36	
LAND SOAK/FLOOD	0	0	0	0	0	0	0	0	7	21	31	24	8	5	0	0	0	
EVAP/TRANS	39	40	44	40	40	44	39	28	15	3	10	25	31	34	26	26	40	
DEEP PERCOLATION	20	20	22	20	20	22	20	14	8	2	6	14	19	20	20	20	22	
CROP WATER REGT	67	60	66	60	60	66	58	43	22	12	36	69	74	61	60	56	62	
EFF RAINFALL	30	5	3	14	8	25	10	7	11	5	8	14	7	15	11	22	19	
CROP BRG REGT	37	55	28	45	51	42	49	36	12	7	28	55	67	46	49	34	43	
OVERALL EFF	45	45	45	45	45	43	45	45	45	55	55	55	55	55	55	55	55	
DIVERSION REGT	82	123	130	103	114	93	107	80	26	13	51	100	122	84	89	62	78	
W/DUTY (USA)	0.55	1.42	1.37	1.19	1.32	0.98	1.24	0.91	0.30	0.15	0.59	1.05	1.41	0.97	1.03	0.91	0.71	

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Click 'Next >' button.

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Irrigation Water Requirement Menu

**Irrigation Water Requirement Menu**

Retrieve from Menu      Retrieve from Map

Add/Edit

Return to Irrigation      **IRRIG WATER MENU**



If you can not find the crop in the Combo Box, new crop data is added by using following procedure.

IrrigWaterReqEdit1 Form

**Irrigation Water Requirement Data Editor**

ID: \_\_\_\_\_

Project: \_\_\_\_\_

Rainfall Sta: \_\_\_\_\_

Evap. Sta: \_\_\_\_\_

Crop: ORANGE

Profile: \_\_\_\_\_

Cancel OK

Record: 14 of 91

Encode new crop name into Text Box of 'Crop' directly.

Microsoft Access

The text you entered isn't on the list.

Select an item from the list or enter text that matches one of the listed items.

OK Cancel

Click 'OK' button.

IrrigCropInput Form

Name of Crop: \_\_\_\_\_

Cancel OK

Record: 14 of 91

Enter new crop name again.

IrrigCropInput Form

Name of Crop: ORANGE

Cancel OK

Record: 14 of 91

Click 'OK' button.

IrrigWaterReqEdit1 Form

**Irrigation Water Requirement Data Editor**

ID: \_\_\_\_\_

Project: \_\_\_\_\_

Rainfall Sta: \_\_\_\_\_

Evap. Sta: \_\_\_\_\_

Crop: \_\_\_\_\_

Profile: \_\_\_\_\_

Cancel OK

Record: 14 of 91

Click 'Cancel' button.

IrrigWaterReqMenu Form

**Irrigation Water Requirement Menu**

Relative Box Menu Relative Font Menu

Add / Edit

Return to Input Menu

Database Menu/Tools

2) Edit Data

Record: 16 of 90

1 | [Move] | of 90

Click 'Move' button to select the information.

Irrigation Water Requirement Data Editor

ID: [ ]

Project: AGUSAN DEL NORTE PROJ

Rafy/felt No: BUTUAN

E-ay. No: STA JOSEFA

Crop: RICE - RICE

Province: AGUSAN DEL NORTE

Cancel Next

Irrigation Water Requirement Data Editor

JAN			FEB			MAR			APR			MAY			JUN		
1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	

Record: 16 of 90

Click 'Next >' button.

Irrigation Water Requirement Data Editor

JUL			AUG			SEP			OCT			NOV			DEC		
1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	

Land Soak = Land Preparation = Crop Maintenance = Storage = Harvest

Cancel Next

After edited, click 'Next >' button.

Irrigation Water Requirement Data Editor

	JAN			FEB			MAR			APR			MAY			JUN		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
RAINFALL DATA	25	19	29	19	17	6	29	19	11	5	9	8	13	9	12	12	23	17
EVAP DATA	42	42	45	33	33	26	39	39	43	38	38	38	43	43	47	38	38	38
LAND SOAK/FLOOD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29	24	29	8
EVAP TRANS	45	45	48	23	12	1	0	0	0	0	0	0	0	0	11	22	36	40
DEEP PERCOLATION	20	20	21	13	6	1	0	0	0	0	0	0	0	0	5	12	18	20
CROP WATER REQT	66	65	69	35	19	2	0	0	0	0	0	0	0	0	44	57	92	68
EFF. RAINFALL	25	19	29	14	7	1	0	0	0	0	0	0	0	0	5	8	23	17
CROP IRRG REQT	41	49	40	22	11	1	0	0	0	0	0	0	0	0	40	49	60	51
OVERALL EFF.	55	55	55	55	55	55	0	0	0	0	0	0	0	0	43	45	45	45
DIVERSION REQT	75	87	73	40	20	1	0	0	0	0	0	0	0	0	88	109	133	113
WQNTY (L/SP)	0.51	1.01	0.77	0.45	0.23	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.93	1.26	1.53	1.31

After edited, click 'Next >' button.

Irrigation Water Requirement Menu


Return from Menu    Return from Map

Add/ Edit

Return to Main Menu    Return to Main Menu

## 4.4 Output Samples

## 1) Salient Features of National Irrigation System

 <b>NATIONAL WATER RESOURCES BOARD</b>		<b>SALIENT FEATURES OF NATIONAL IRRIGATION SYSTEM</b>		
<b>Name of System</b>				
<b>LABUGAON</b>				
1) Water Resources Region	1	2) Source of Water Supply	Labugaoon River	
3) Approved Water Rights	6044	4) Official Opening of the System	Jun. 1956	
5) Original Construction Cost	P 12,599,741.25	6) Date of Rehabilitation	Aug - Sept. 1993	
7) Cost of Rehabilitation	P 5,936,127.66	8) Current Status	Operating System	
9) Firmed-up Service Area	1961	10) Designed Area	1961	
11) Potential Area	1961	12) Number of Landowners		
13) Number of Farmers Served	2153	14) Average Farm Size	0.91	
15) Number of Lots		16) Diversion Type	Diversion Dam	
17) Diversion Capacity	4,707	18) Length of Main Canal	13,908	
19) Length of Laterals	17,342	20) Number of Turnouts	111	
21) Length of Service Roads	3,596	22) Length of Access Roads	10,879	
23) Drainage Density		24) Farm/lot Density	31.08	
25) Climatic Condition (Coronas)	Type II	26) Average Annual Rainfall	7.4	
27) Main Crops	Rice			
28) Towns / Province Served	Towns	Province	Area (ha)	
	Solano Dingras	Ilocos Norte Ilocos Sur	18349 2221	
	Total		1961	
29) Irrigated / Benefitted Area	1985-1995			
Average Season	Wet	Dry	Third	
Irrigated Area (ha)	1290	790		
Benefitted Area (ha)	1290	790		
Average Yield (cav/ha)	80	60		
30) Farmers Irrigators Association (FIA) with Memorandum of Agreement for Operation and Maintenance	Nature of Contract	Number of FIA	Length of Canal (km) under contract	Area Covered (ha)
	Type III	6	31.25	1169.84
31) Future Expansion	Expansion of about 790 has. when the system is provided with drainage re-use structure in the downstream areas & 630 has. When the Palisguan RAIPP, Phase II is implemented			
32) Deterioration of the System				
33) Other Information				

2) Irrigation Water Requirement Data

Name of Project	NURVA EQUA (RAINFALL STA. - CARRANAYUM; EVAP. STA. - CLSU)												UNITS: mm																											
	JAN			FEB			MAR			APR			MAY			JUN			JUL			AUG			SEP			OCT			NOV			DEC						
MONTH	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3				
RAINFALL DATA	0	1	1	0	0	1	1	1	1	1	1	1	1	1	2	2	11	19	28	24	39	36	45	35	65	57	54	47	53	45	14	11	7	9	6	4	1	3	2	
EVAP. DATA	57	57	63	66	66	66	53	71	71	78	79	79	79	84	84	70	46	46	48	43	43	43	47	35	35	39	39	40	40	44	45	45	45	45	45	51	51	57		
LAND SOAK/FLOOD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	27	28	8	8	8	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EVAP./TRANS	63	61	46	23	2	0	0	0	0	0	0	0	0	0	14	40	45	51	52	47	47	47	47	51	38	38	42	31	16	4	11	25	42	48	50	90	57	62		
DEEP PERCOLATION	17	16	12	5	0	0	0	0	0	0	0	0	0	0	4	10	15	17	17	17	17	17	17	17	17	17	17	12	6	1	5	10	17	17	17	17	17	17	18	
CROP WATER REQ.	80	77	58	28	3	0	0	0	0	0	0	0	0	0	42	77	88	78	63	63	70	63	63	70	55	55	60	43	23	12	37	62	87	72	71	68	73	73	81	
EFF. RAINFALL	0	1	0	0	0	0	0	0	0	0	0	0	0	0	5	13	28	24	20	26	45	30	55	55	53	36	21	9	6	8	7	9	6	4	1	3	2			
CROP WTRG. REQ.	78	77	56	28	3	0	0	0	0	0	0	0	0	0	38	64	61	51	47	28	18	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OVERALL EFF.	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	
OVERFLOW REQ.	144	139	105	52	5	0	0	0	0	0	0	0	0	0	67	141	135	113	104	62	41	78	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WPROQTY (USM)	1.67	1.61	1.10	0.60	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87	1.48	1.56	1.30	1.20	0.71	0.47	0.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

NOTE: Rainfall data is for 80% probability of occurrence or it out of 5 years.

NOTE: Rainfall data is for 80% probability of occurrence or it out of 5 years.